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APPENDIX A

CALCULATION OF EERs

The method of calculating EERs is necessarily determined by the availability of data. In this appendix the sources and methods used to make the necessary computations are described, and the detailed data underlying the aggregate figures are presented. The order of presentation is: exports, imports, invisibles and capital transactions.

Exports

The task of calculating EERs for export commodities was broken into two periods: 1953 to 1960, and 1961 to 1969.¹ The reasons for this division are inherent in the nature of the trade regime. Prior to 1960, a multiple exchange-rate system was the basic means by which incentives were accorded to various export categories. After 1960, there was no longer a multiple exchange-rate system, and differentials among export categories emerged primarily because of the export rebate system.

Table A-1 gives the estimates of the EERs for exports between 1953 and 1960. For most major export commodities, such as tobacco and cotton, estimates of the EERs were obtained in a straightforward manner: they were the rates prevailing in the year in question, and were not frequently altered. For "marginal exports," however, the situation was rather different. While the rates were as indicated, the number of commodities to which these rates applied varied from time to time. Thus the class of exports eligible for the high rates both increased and decreased over time, as did the rates applicable to them. It was not possible to obtain detailed lists of the commodities eligible for the "marginal export rates" for the 1953-to-1958 period. When data were available for a specific "minor" export (such as meerschaum pipes, olive oil, etc.) these rates are presented separately. Thus while it would be this author's judgment that textiles, for example, were subject to the marginal export rates given in Table A-1, there is no documentation for that view.

The bottom part of Table A-1 gives weighted EERs for exports for broad commodity classes and for exports as a whole. Weights for individual commodities within a class were derived by taking the total 1956 value of exports

1. Estimates of EERs for 1970 and 1971 were made on a much cruder basis, due to the absence of detailed data. They are presented in Appendix C.

Table A-1
Export EERs, 1953 to 1960 (TL per dollar equivalent of foreign currency)

	1953	1954	1955	1956	1957	1958	1959	1960
<i>Individual commodities</i>								
Raisins	2.80	3.30	3.53	3.69	4.00	5.60	9.00	9.00
Fresh fruit	2.80	2.80	4.90	5.60	5.60	9.00	9.00	9.00
Dried figs	2.80	2.80	3.08	3.22	3.36	5.60	9.00	9.00
Chrome	2.80	2.80	2.80	2.80	2.80	4.90	9.00	9.00
Cotton	2.80	2.80	2.80	3.78	3.78	9.00	9.00	9.00
Olive oil	2.80	2.80	2.80	2.80	5.60	9.00	9.00	9.00
Meerschaum pipes	3.92	4.48	4.90	5.60	5.60	9.00	9.00	9.00
Tobacco	2.80	2.80	2.80	2.80	2.80	4.90	5.60	9.00
Mohair	2.80	2.80	3.50	3.50	4.48	9.00	9.00	9.00
Hazelnuts	2.80	2.80	2.80	2.80	2.80	5.60	9.00	9.00
Copper	2.80	2.80	2.80	2.80	2.80	4.90	9.00	9.00
<i>Weighted EERs</i>								
Minerals	2.80	2.80	2.80	2.80	2.80	4.90	9.00	9.00
Traditional crop exports	2.80	2.85	2.89	2.91	2.95	5.14	6.77	9.00
Cotton	2.80	2.80	2.80	3.78	3.78	9.00	9.00	9.00
Mohair	2.80	2.80	3.50	3.50	4.48	9.00	9.00	9.00
Fresh fruit	2.80	2.80	4.90	5.60	5.60	9.00	9.00	9.00
Marginal exports (\$)	4.30	5.18	4.90	5.60	5.60	9.00	9.00	9.00
Marginal exports (EPU)	3.92	4.48	3.92	4.48	4.48	9.00	9.00	9.00
Marginal exports (other currencies)	3.50	3.72	4.20	4.20	5.20	9.00	9.00	9.00
			3.50	3.50	3.50			
<i>Weighted export rate</i>	2.84	2.89	2.96	3.15	3.17	5.87	7.61	9.00

- Notes:
- From 1953 to 1957, specific premia were extended in varying amounts to raisins and figs. These were converted to *ad valorem* rates by taking the estimated domestic wholesale price as given in *Fiat İstatistikleri 1949-1965*, Pub. No. 562, SIS (Ankara), 1968. The estimates are therefore quite rough.
 - For chrome, export retention rights of 100 per cent of f.o.b. value were extended in 1956 and abolished in 1957. Their value was not included in the calculation.
 - A 35 per cent premium on cotton exports was extended in the summer of 1956, removed in the fall of 1956 (when it was suspected that switch deals were taking place) and reimposed during the 1957 export season. It is included in the EERs for both years.
 - Retention rights of 1 to 15 per cent of f.o.b. exports, for own-use only, were extended during 1957 to hazelnut and tobacco exports. The value of these rights is not included in the calculations.
 - Weights are derived by taking the percentage of the respective export commodities of the value of the total group in 1956 exports. The value of exports included in the group was \$228.6 million, contrasted with total exports in that year of \$305 million. Omissions include livestock and feedstuffs, and a variety of miscellaneous, generally agricultural and mineral. For marginal exports, the EPU rate was used, since no data were available on the fraction of exports eligible for the marginal rate going to each currency area. The minerals category includes copper (7.5 per cent) and chrome (10.2 per cent). Traditional crop exports include raisins (6.7 per cent), dried figs (1.6 per cent), tobacco (40.9 per cent) and hazelnuts (13.0 per cent).

Sources: Data are compiled from various sources. The most important was the *Annual Report on Exchange Restrictions*, International Monetary Fund (Washington), various years. Selected price quotations were also found in the *Quarterly Reports*, EIU, and other sources.

of commodities for which rates were available, and then taking the fraction of that value represented by the commodity in question. Thus in 1956 copper exports were \$17.1 million and chrome exports were \$23.3 million. To obtain the weighted rate for mineral exports, the effective exchange rate for copper was multiplied by 0.423 and that for chrome by 0.577. A similar method was used to obtain the overall export EER.

Multiple exchange rates were not in use for exports during the period 1961 to 1970, and the main forms of differential incentives for exports took the form of export rebates.² The law enabling export rebates was passed in 1963.³ Several decrees subsequently modified the operation of export rebates, extending and altering their coverage. The basic rate-setting mechanism throughout the period was to grant temporary rates which would be applicable until a rate was established. Once a rate was established, it could be altered upon petition of exporting firms, and firms which had received smaller temporary rates were entitled to collect the difference, while firms which had received more than their permanent rate were obliged to refund the difference.

The stated intent of allowing rebates was to offset taxes and duties paid by exporters on their production and inputs. A question thus arises as to whether the export rebates constituted an export incentive or simply an offset to a previously existing export disincentive. The issue is inherently muddy: (1) insofar as rebates were a genuine repayment of taxes and duties, they constituted a genuine incentive to exports only if home goods and import-substituting producers were subject to the same taxes; (2) insofar as rebates exceeded the amount of taxes paid they constituted a genuine differential incentive to export regardless of whether import-substitutes and home goods were subject to similar taxes.

The second issue is troublesome only because it is not possible to obtain estimates of the subsidy component of rebates. The law enabling rates, and the subsequent decrees determining them, were so worded that only actual taxes and duties paid were to be rebated. However, (1) rebate rates were set by inspection of the tax and duty components of costs of one or several large firms in an industry and if other firms had a differential tax incidence, the rebate rates could contain an element of subsidy to some firms; (2) rebate rates were set as a percentage of the f.o.b. price, so an increase or decrease in that price could result in a subsidy or failure to offset the taxes paid, even if the initial rebate rate had been an exact tax offset; and (3) many Turkish producers claimed in interviews that despite the wording of the Rebate Law rebate rates were in fact set in a manner designed to enable a firm to cover its

2. There were, in addition, other incentives described in Chapter VII. The value of these incentives is not included in the estimate of export EERs.
3. Law No. 261, June 27, 1963.

costs and earn 5 per cent on gross export sales, independent of the actual taxes paid.⁴ Whether this last was so is vigorously contested by Turkish officials; however, inspection of the rebate rates below will suggest that there must have been some element of the profitability calculus in the rate-setting decision, at least for some exports.

The first issue, whether home-goods and import-substitutes' costs were equally taxed, is the more important, and the more difficult question to answer. Most of the rebated taxes (production tax, import and associated duties, stamp and financial taxes) applied to all transactions, not simply to exports. However, the incidence of these taxes could differ between firms and between industries. On net, agricultural output was subject to less taxation than was industrial output. Thus it could be argued that there was already a differential incentive, in favor of agricultural exports at least. In terms of industrial output, there is no *a priori* basis for believing that Turkish taxation discriminated in any systematic way between import-substitutes, exportables and home-goods. Hence we conclude that on balance export rebates probably did constitute a differential incentive, both in their tax rebate component and in any subsidy that was in fact granted. It must be remembered though that there were undoubtedly differentials between industries. The conclusion is at best a rough-and-ready first approximation.

Table A-2 gives the rebate rates in effect at various points for which the data are available. No rebate rates had been set for 1964 (except the provisional rates) for commodities other than textiles. By 1967 rates had been raised on a number of items, and some new items had been accorded definite rates. A far larger list of commodities had been accorded specific rates by 1969, of which the items listed are just a small sample. A variety of unprocessed agricultural products were also accorded rebates by that date. The rates varied widely, from 9 per cent for olive oil to 49 per cent for boric acid; some individual textile and clothing rates, not included in Table A-2, were even higher.

Table A-3 gives the value of exports in each category eligible for rebates, the amount of rebates actually paid, and the rebates paid as a per cent of exports. The categories for 1964 to 1966 are not entirely comparable with those for 1968 and 1970, and except for textiles, food products, and a few other well-defined classes, comparisons for individual categories between periods should be made with care. The totals are comparable for both periods,

4. The law and decrees stated that rebate rates were to be determined in such a way that taxes and duties paid were to be refunded in an amount permitting firms to earn 5 per cent on their gross export sales. The wording of the law was that rebates might cover *less* than full taxes paid although it is not so certain that this was what happened in practice. But government officials obviously could not have worded the law otherwise without violating GATT rules.

Table A-2

Rebate rates on representative commodities, by year, 1964 to 1969 (per cent of f.o.b. price)

	1964	1967	1968	1969
<i>Temporary rates</i>				
Agricultural commodities	0.0	5.0	—	—
Manufactured commodities	10.0	15.0	—	—
<i>Negotiated rates</i>				
Textiles				
Thick combed yarn	4.6	4.6	15.08	15.08
Thick carded yarn	3.2	3.2	13.48	13.48
Unbleached cotton fabrics	21-23	36-40	46.00	46.00
Towels	18.9	24.4	34.40	34.40
Woolen yarn	10.5	20.0	33.30	33.30
Mens' nylon socks	23.5	23.0	33.00	33.00
Non-textiles				
Chrome concentrate	—	13.0	13.00	24.81
Copper cables	—	37.3	47.30	47.30
Window glass	—	12.9	25.67	32.11
Olive oil	—	—	—	9.10
Tomato paste	—	—	—	23.06
Leather products	—	—	—	18.50
Boric acid	—	—	—	49.29
Iron and steel	—	—	—	28.84
Electric lamps	—	—	—	35.43
Cement	—	—	—	45.58
Plastic	—	—	—	38.87

Sources: *Resmi Gazete*, Nos. 11712, May 26, 1964, 12713, June 30, 1967, and 12887, April 30, 1968; *Yatırımların ve İhracatın Teşviki ve Uygulama Esasları*, SPO, 1969, Pub. No. DPT 773-TUD:4/.

in the sense that they include all exports subject to rebate. Some commodities ineligible for rebates in the early years became eligible at later dates, though. Thus the coverage of the rebate system increased vastly. This is most apparent between 1968 and 1970. In 1969, a variety of unprocessed agricultural products, including cotton (10 per cent), tobacco,⁵ raisins (37 per cent), and fresh fruits and vegetables (11.3 per cent) became eligible for rebates. Whereas eligible exports accounted for 2.5 per cent of all exports in 1964, they constituted 5.3 per cent of exports in 1967 and 29.5 per cent in 1969.

Although it would be preferable to employ the specific rebate rates actual-

5. Rebates of TL 2.8 million were reported against exports of TL 4.2 million of tobacco. That figure is far below the value of tobacco exports, and the basis for the number is not known.

Table A-3
Rebates and exports of commodities eligible for rebates, 1964 to 1970 (values in thousands of TL)

	1964			1966			1968			1970		
	R	X	%	R	X	%	R	X	%	R	X	%
Food	1,877	33,985	5.5	3,334	43,599	7.6	3,736	28,596	13.1	25,953	266,727	9.7
Beverages	-	-	-	230	2,303	10.0	364	2,149	16.9	1,116	8,718	12.8
Textiles-clothing	5,539	22,629	24.5	4,641	9,978	46.5	22,399	51,539	43.5	56,661	210,115	27.0
Wood products	448	4,479	10.0	2,796	27,266	10.3	1,043	10,181	10.2	7,630	33,518	22.8
Paper	-	-	-	-	-	-	2,574	4,832	53.3	2,502	3,278	76.3
Hides and leather	1,131	11,323	10.0	59	772	7.6	565	1,325	42.6	9,962	39,124	25.5
Chemicals	-	-	-	166	1,885	8.8	10,594	45,233	23.4	46,211	149,799	30.8
Glass	-	-	-	324	2,261	14.3	592	3,950	15.0	1,478	4,728	31.2
Ceramics	-	-	-	-	-	-	69	481	14.3	115	513	22.4
Cement	-	-	-	-	-	-	48	105	45.7	9,542	36,819	25.9
Iron and steel	20	203	9.9	5,323	28,700	18.2	43	287	15.0	152	523	29.1
Other metals	-	-	-	127	1,108	11.5	14,400	95,441	15.1	29,055	165,785	17.5
Metal products	-	-	-	707	2,341	30.2	83	412	20.1	4,337	8,846	49.0
Machinery	-	-	-	-	-	-	298	672	44.3	4,532	8,982	50.4
Electric machinery	-	-	-	-	-	-	154	648	23.8	464	1,434	32.4
Electronics	-	-	-	-	-	-	155	94	164.9	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	260	850	30.6
Railroad equipment	-	-	-	-	-	-	-	-	-	-	-	-
Rubber products	-	-	-	-	-	-	-	-	-	2,889	13,340	21.7
Gift items	111	1,111	10.0	544	5,459	10.0	756	6,720	11.3	-	-	-
Miscellaneous	2,724	27,308	10.0	5,354	73,516	7.3	-	-	-	658	3,294	20.0
Agricultural products	-	-	-	-	-	-	-	-	-	70,438	651,928	10.8
Total	12,117	103,602	11.7	27,547	219,548	12.5	57,873	247,832	23.3	288,588	1,732,899	16.6

Notes: a) Categories for 1964 and 1966 do not exactly correspond to those for later years. The miscellaneous category in 1964 and 1966 includes many of the items left blank, including a large category, "mining products."
b) Figures do not always add to totals. The source of the discrepancy is unknown.
c) R = value of rebates; X = value of exports; % is the implied rebate percentage.

d) The average rebate rates for 1965, 1967, and 1969 were 9.7, 9.9, and 14.6 per cent, respectively.
Sources: 1964, 1966 and 1970, data kindly supplied by SPO; 1968, 1970 *Yılı Programı*, p. 527.

ly in force in making EER estimates, some weighting system is required. Thus in the absence of data on the value of exports in each detailed rebate category, the percentage numbers given in Table A-3 are used in making EER estimates for the 1961-to-1969 period. Since there were undoubtedly some minor differences in the timing of exports from the timing of rebate payments, use of the rebate rates derived from the data in Table A-3 undoubtedly results in some error. However, inspection of the year-to-year fluctuations in rebates as a per cent of exports in each category suggests that with the possible exception of the very small export categories the changes in percentages from year to year conform rather closely to the general trends in rebate rates indicated in Table A-2.

Table A-4 gives the EERs for various categories of exports for 1961 to 1969, as implied by the rebate rates, and also gives the weighted EERs for traditional, non-traditional, and total exports, based on the rebate rates im-

Table A-4
EERs for exports, 1961 to 1969 (TL per dollar f.o.b.)

	1961	1962	1963	1964	1965	1966	1967	1968	1969
<i>Traditional exports</i>									
Tobacco	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.90
Cotton	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.90
Figs and raisins	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	10.17
Chrome concentrate	9.00	9.00	9.00	9.00	9.00	9.00	10.17	10.17	11.25
Other traditional	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
Weighted traditional export EER	9.00	9.00	9.00	9.00	9.00	9.00	9.02	9.02	9.37
<i>Non-traditional exports</i>									
Fresh fruit and vegetables	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.99
Processed foods	9.00	9.00	9.00	9.49	9.37	9.68	9.42	10.17	9.60
Textiles	9.00	9.00	9.00	11.21	12.05	13.18	11.65	12.91	12.04
Paper products	9.00	9.00	9.00	9.90	9.90	9.90	13.31	13.79	12.04
Glass	9.00	9.00	9.00	9.90	9.78	10.29	10.31	10.35	11.61
Metal products	9.00	9.00	9.00	9.90	9.90	11.72	10.24	10.81	11.90
Weighted non-traditional export EER	9.00	9.00	9.00	9.62	9.69	10.09	9.72	10.28	10.31
Weighted export EER	9.00	9.00	9.00	9.04	9.04	9.06	9.06	9.09	9.96

Note: Weights used were the value of exports of the commodity group in 1967 as a per cent of all exports included in the calculation. Of \$522.7 million of exports in 1967, \$454.4 million were included in these groups. Traditional exports (94.2 per cent) are slightly overweighted by this procedure.

Sources: Table A-3 and text of Appendix A.

plied by Table A-3. The weights used were the value of exports in 1967 for each export category as a per cent of the total value of exports included in the computations. The year 1967 was employed as a base for weighting because the commodity distribution of exports in that year was judged to be reasonably representative of the average structure of Turkey's exports during the 1960's. The nominal EERs given in Table A-4 are those employed throughout the text when measuring differentials in incentives between various commodity groups.

Import EERs

The computation of EERs for imports is inherently more difficult than that for exports. Not only were there multiple exchange rates over part of the period, but at various times tariffs, production taxes, guarantee deposits, stamp duties and port taxes were also imposed on the several categories of imports. In the middle and late 1960's some categories of imported capital goods were eligible for deferred payments or reduced schedules of duties and other surcharges at a subsidized rate of interest.

For some components of these charges, fairly complete information is available. For other components the data are far less adequate, and considerable judgment had to be used in deriving the estimates. Before discussing the method for estimating the EERs for import categories then, it will be useful to discuss the nature of the problems involved and the procedures used to analyze the various components of the TL cost of a dollar of imports.

Tariffs. Early in 1954 Turkey switched from specific to *ad valorem* tariffs on virtually all imports. No effort was made to estimate the *ad valorem* equivalent of tariffs prior to 1954, and hence the estimates of import EERs start with that year. Few tariff rates were altered between 1954 and 1964, but a major revision of the Turkish tariff structure was undertaken and effected in that year, and the set of duties imposed then remained in force with few rate modifications.

Both the 1954 and 1964 tariff schedules were obtained for the computation of the tariff component of EERs.⁶ It proved impossible to trace the changes, generally stated to be few and highly infrequent, in tariff rates between 1954 and 1964, or after 1964. Thus while there is reason to believe that there were very few changes, whatever changes occurred are not taken

6. 1954 tariff rates were obtained from T.C. Başvekalet, "İstatistik Umum Müdürlüğü," *Gümrük Giriş Tarife Cetveli, Neşriyat No. 365* (Ankara), 1956. 1964 tariff rates were obtained from Law No. 474, "Import Customs Tariff, 1964," from the *Official Gazette, No. 11711*, May 25, 1964, as translated by Türk Argus Ajansi.

account of in the estimation of tariff rates. It is not believed that this omission is of significance.

More important perhaps is that the tariff categories do not correspond with the import classifications for which data are available. Thus the import categories on which tariffs are based are much more detailed than the categories for which value of imports is reported. Thus a weighting system for tariffs proved to be impossible.

As an alternative, it was decided to go through the 99 chapters of the tariff code, selecting items from each chapter containing commodities which Turkey imports. The basis of selection was primarily the author's judgment as to the relative importance and representativeness of the individual items. Some chapters cover a much higher value of imports than others, and more items were included from those chapters than from others.

The tariff rates for the selected items were then collected from the 1954 and 1964 tariff schedule. Each specific commodity category was then, somewhat arbitrarily, assigned to one of four groups: consumer goods; producers' raw materials and intermediate goods; capital goods; and imports with domestic substitutes. The last category cuts across the other three, but was deemed useful to indicate the height of protection accorded to domestically produced import-competing goods.

An unweighted average of the individual rates for each group was taken as representative of the functional grouping. Table A-5 lists the specific commodity categories selected in the sample, gives the tariff rates applicable to them from the 1954 to 1964 tariffs, and indicates the commodity class to which the item was assigned. Names of the commodity groups have generally been considerably shortened, with the name adopted being designed to provide an idea of the contents of the group. As can be seen, the allocation of items to the four categories is of necessity rather arbitrary: some items designated consumer goods are clearly also imports with domestic substitutes, and there are many cases where an item has more than one category of end-use (e.g. locks).

Altogether, 111 commodities were selected for the sample: there are 37 items designated consumer goods, 47 producers' intermediates and raw materials, 13 import-substitutes, and 14 capital goods.

Every effort was made to make the sample as representative as possible, and inspection of other categories does not suggest any obvious bias in the sample. It must be recalled that the absence of any meaningful quantity weights somewhat biases the resulting tariff averages, although the direction and magnitude of the bias is unknown. The tariff rates given in Table A-5 are those used for estimating EERs and are employed, by category, to get estimates of the unweighted tariff rates used below.

Table A-5
Sample of import commodities chosen, 1954 and 1964 tariff rates, and commodity class
to which assigned

BTN Code and Name	Class	Tariff Rate	
		1954	1964
5.10 Ivory	CG	10	20
7.06 Root and tuber vegetables	CG	50	25
8.01 Tropical fruit	CG	100	75
9.01 Coffee unroasted	CG	75	75
Coffee roasted	CG	100	100
9.02 Tea	CG	75	100
9.04 Pepper	CG	100	100
10.01 Wheat	CG	50	15
13.01 Dyeing raw materials	RM	100	100
15.12 Hydrogenated fats and oils	RM	60	60
17.01 Beet and sugar cane	CG	100	150
18.01 Cocoa beans	RM	10	50
19.03 Macaroni and pastas	CG	50	50
20.05 Jams	CG	150	75
21.05 Soups	CG	100	75
22.03 Beer	CG	150	100
23.04 Oil cakes	RM	15	15
25.03 Sulphur	RM	20	75
25.19 Magnesium carbonate	RM	25	25
25.24 Asbestos	RM	25	15
26.01 Metallic ores	RM	5	5
27.01 Coal	RM	10	60
28.04 Hydrogen	RM	50	50
28.06 Hydrochloric acid	RM	15	40
28.09 Nitric acid	RM	5	40
28.19 Zinc oxide	RM	10	20
28.26 Tin oxides	RM	15	15
28.39 Nitrates and nitrites	RM	5	20-25
29.06 Phenols	RM	25	25
29.14 Monoacids	RM	100	50
29.38 Vitamins	CG	5	5
31.02 Nitrogenous fertilizers	CG	35	35
32.03 Synthetic tanning materials	RM	25	40
24.01 Soap	CG	100	50-60
35.02 Albumin	RM	30	30
36.03 Blasting fuses	RM	50	100
37.02 Photographic film	CG	35	35
38.05 Tall oil	RM	15	35
39.02 Polymerization products	RM	50	50

Table A-5 (continued)

BTN Code and Name	Class	Tariff Rate	
		1954	1964
40.01 Natural rubber	RM	50	40
40.11 Rubber tires	MS	30	40
41.02 Tanned leather	RM	45	90
42.02 Leather travel goods	CG	100	150
43.03 Articles of furskin	CG	100	200
44.15 Plywood	RM	40	50
45.03 Natural cork articles	RM	35	50
46.02 Woven plaiting materials	RM	40	50
47.01 Paper pulp	RM	5	15
48.05 Corrugated paper, paperboard	MS	60	60
48.16 Packing containers	RM	100	75
50.04 Silk yarn	RM	40	40
51.04 Woven fabrics, man-made fiber	MS	100	150
53.11 Woven fabrics of wool	MS	80	100
54.01 Raw flax	RM	20	20
55.04 Carded and combed cotton	RM	20	20
55.06 Cotton yarn	MS	60	60
56.04 Man-made discontinuous fibers	MS	50-75	30
56.06 Yarns of man-made fibers	MS	100	100
57.03 Unspun jute	RM	5	5
58.05 Narrow woven fabrics	MS	100	100
60.01 Knitted fabric	MS	100	100
61.02 Womens' outer wear	CG	150	100
62.02 Linen (bed, table, etc.)	CG	100	100
64.05 Footwear	CG	100	100
65.05 Hats and headgear	CG	70	70
66.01 Umbrellas	CG	100	100
67.04 Wigs	CG	100	100
68.13 Asbestos articles	RM	25	75
69.02 Refractory bricks	RM	40	40
69.05 Roofing tiles	MS	75	50
69.10 Sinks, wash basins	CG	100	100
70.05 Common plate glass	MS	50	50
71.12 Jewelry	CG	20	20
73.07 Forged iron and steel products	RM	15	15
73.14 Iron and steel wire	RM	15	30
73.26 Barbed wire	RM	25	40

Table A-5 (continued)

BTN Code and Name	Class	Tariff Rate	
		1954	1964
73.32 Bolts and nuts	MS	35	50
74.07 Copper tubes and pipes	RM	10	40
74.17 Copper cooking and heating items	CG	40	50
75.03 Nickel plate	RM	20	25
76.08 Aluminum structures	KG	15	50
77.02 Magnesium rods, bars, etc.	RM	5	5
78.04 Lead foil and strip	RM	40	40
79.05 Zinc roofing material	RM	30	50
80.03 Tin plate, sheet, strip	RM	5	10
82.02 Saws	RM	25	50
83.01 Locks	CG	50	75
84.06 Internal combustion engine	KG	5	35
84.15 Refrigeration equipment	KG	10	60
84.22 Lifting, loading machinery	KG	5-10	50
84.31 Paper-making machinery	KG	5	30
84.37 Textile machinery	KG	5	35-40
84.45 Metal working machine tools	KG	5	50
84.63 Vehicle parts	KG	5	30
85.20 Electric filament lamps	CG	50	50
85.25 Insulators	RM	35	50
86.06 Railway rolling stock	KG	10	30
87.01 Tractors	KG	25	30
87.02 Buses and autos	KG	40	60-76
88.02 Airplanes	KG	5	0-5
89.01 Ships	KG	50	50
90.07 Photo cameras	CG	30	60
90.17 Medical instruments	RM	15	35
90.27 Meters	KG	25	50
91.01 Watches	CG	25	75
92.01 Pianos	CG	15	50
94.03 Furniture and parts	CG	80	100
96.05 Cosmetic articles	CG	100	100
97.02 Dolls	CG	100	100
98.03 Fountain pens	CG	60	75
98.08 Typewriter ribbons	CG	40	75

Note: Abbreviations for class are: CG, consumer goods; KG, capital goods; RM, raw materials and intermediate producers' goods; MS, imports with domestic substitutes.

Sources: T.C. Başvelaket, "İstatistik Umum Müdürlüğü," *Gümrük Giriş Tarife Cetveli, Neşriyat No. 365* (Ankara) 1956; and Law No. 474, Import Customs Tariff, 1964 *Official Gazette No. 11711*, May 25, 1964, as translated by Türk Argos Ajansi.

Municipality tax. Municipality taxes have been levied against imports throughout the period under consideration. The municipality tax has been constant, at 15 per cent of the customs duty charged against imports. Thus an import subject to a 50 per cent tariff was also subject to a municipality tax equal to 7½ per cent of the c.i.f. price.

Wharf tax. A wharf tax is, and has been, levied upon the sum of c.i.f. price, tariff, municipality tax, and other costs of landing goods (opening a letter of credit, stamps, storage charges, etc.). The rate of tax was 2½ per cent of the sum of all previously noted costs until 1966 and has been 5 per cent since that time. Thus for a commodity with miscellaneous costs equal to 10 per cent of c.i.f. price, a commonly accepted estimate, the wharf tax would be:

$$WT = w [p_f (1.10 + 1.15 t)]$$

where WT is the wharf tax levied, w is the rate of wharf tax, p_f is the c.i.f. price of the good, and t the tariff rate. Despite the low nominal rate of the wharf duty, it generally exceeded the municipality tax, because of its much larger base. With a tariff rate of 20 per cent, for example, the municipality tax was equal to 3 per cent of the c.i.f. price, and the wharf tax equal (with the estimate of 10 per cent of c.i.f. price for miscellaneous charges) to 3.3 per cent at a 2½ per cent rate and 6.6 per cent at the 5 per cent rate of c.i.f. price. In computing effective exchange rates for imports, no attempt was made to estimate the magnitude of other landing costs. Its magnitude cannot be more than 0.25 per cent prior to 1966 and 0.5 per cent of the basic exchange rate thereafter. This omission does not affect the relative EERs between different import categories, but does result in a slight understatement of the differential between import and export EERs.

Production tax. A major source of revenue in Turkey is the *İstihsal Vergisi*, generally referred to as the production tax (sometimes called expenditure tax). It is levied both on imported goods (on the basis of landed cost, including all previously indicated charges) and on domestic output. The production tax is levied against four basic lists:

- (I) Primary Products. Imports and domestically produced raw materials (many of which are really intermediate goods) are subject to the same rate of tax, on landed cost and producers' sale price, respectively.
- (II) Some Finished Products. For commodities on List II, the rate of tax, on the same basis as for List I, is the same for imports and domestically produced products.
- (III) Coffee, Cocoa, Beverages and Glucose. Imported and domestically produced commodities are taxed at the same rate.

Table A-6
Production tax lists and schedules in effect, 1964

List I – Primary Products

Cement, bricks, and other heat resisting materials	12.5%
Iron products (rails, bars, wires, etc.)	12.5%
Iron and steel (pig iron and steel ingots)	20.0%
Copper (ingots, bars, sheets, strips, profiles, etc.)	30.0%
Other metals or minerals including sulfur	30.0%
Petroleum products	
Flash point below 30°C	TL 450 per ton
Flash point 30°–55°C	TL 240 per ton
Flash point over 55°C	
for 80% refined before cracking	TL 230 per ton
for 20% refined before cracking	TL 230 per ton
light oils	TL 50 per ton
L.P.G.	TL 50 per ton
Synthetic rubber	20%
Plastic	40%
Furs	75%
Bones and horns	75%
Precious stones	75%
Paper and pulp	
With over 70% wood	15%
Other	20%
Glass	20%
Textiles	
Animal yarns	
wool yarn	20%
other yarn	36%
Vegetable origin	
jute, sisal, manila	15%
cotton yarn	18%
others	36%
Electricity (domestic and hotels excluded)	TL 0.01 per kwh
Gas	TL 0.015 per M ³
Miscellaneous tariff nos.	
05.14, 13.02, 27.12, 27.13	18%
Toilet products and perfums	30%
Soap (except ordinary)	15%

List II – Finished Products

Ammunition, explosives and arms	25%
Matches	TL 0.60 per 1,000
Vehicles	
Bicycles (except childrems')	20%
Motorcycles	20%
Trucks (small)	25%
Passenger cars	25%

Table A-6 (continued)

Vehicles (continued)	
Chassis with engines	15%
Chassis without engines	10%
Watches and clocks	
Gold plated	40%
Silver plated	30%
Others	20%
Radios, record players, etc.	
Record players, combinations and tape recorders	30%
Battery powered radios	18%
Radio receivers	20%
Gramophones	25%
Photographic equipment and film	18%
Ceramic products	20%
China products	40%
List III – Coffee, Cocoa, Beverages and Glucose	
Coffee	TL 5 per kg
Cocoa and cocoa products	30%
Beverages <i>not</i> produced by the Monopoly Administration	
Beer	TL 0.4 per liter
Champagne	TL 15 per liter
Other wine	TL 0.2 per liter
Whiskey	TL 30 per liter
Glucose	TL 0.5 per kg.
List IV – Imported Products	
Products from cement or other heat resisting materials	10%
Metal products	
Machines (to be established)	10%
Other machines	18%
Bicycles (childrens' only)	15%
Other metal products	25%
Rubber products	25%
Plastic products	35%
Paper products	15%
Glass products	18%
Textiles	
Jute, sisal and manila products	12.5%
Others in List I	18%
Fur products	60%
Products made from horns and bones	60%
Products from precious stones	60%
Coffee products	25%
Cocoa products	25%
Miscellaneous (tariffs 28.02, 28.42, 28.54, and 28.58)	15%

Source: Data supplied by Professor Wayne Snyder.

(IV) Imported Products. Only imported products on this list are subject to tax, on the basis of the landed cost (c.i.f. price, tariff, municipality tax, miscellaneous costs, plus wharf duty).

The production tax for Lists I to III is levied at the same rate on imports and domestically produced goods in the same category. But elements of extra protection against imports nonetheless exist. Since the tax is levied upon landed cost, the tariff and other import taxes are in fact cascaded. And some

Table A-7
Domestic production tax, import production tax, and custom collections, 1952 to 1969
(millions of TL)

	Domestic Production Tax Revenues	Import Production Tax Revenues	Custom Duties	Value of Domestic Production	Value of Imports	(1) as % of (4)	(2) as % of (5)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1952	162	225	191	1,490	1,556	10.8	14.3
1953	187	220	203	1,839	1,491	10.0	14.8
1954	220	200	214	2,248	1,339	9.8	14.9
1955	282	212	247	2,578	1,393	10.9	15.2
1956	343	170	193	3,290	1,140	10.4	14.9
1957	453	191	187	4,157	1,112	10.8	17.2
1958	453	295	249	5,418	882	8.3	33.4
1959	506	711	551	6,586	1,315	7.6	54.1
1960	506	681	575	6,886	2,214	7.3	30.8
1961	506	660	612	7,577	4,585	6.6	14.4
1962	618	837	737	8,323	5,599	7.4	14.9
1963	685	883	796	9,462	6,216	7.2	14.2
1964	705	744	948	10,475	4,878	6.8	15.2
1965	908	895	1,155	11,742	5,193	7.7	17.2
1966	1,144	1,061	1,413	13,727	6,522	8.3	16.3
1967	1,302	1,167	1,366	16,006	6,219	8.1	18.8
1968	1,558	1,199	1,332	17,760	6,937	8.8	17.3
1969	1,688	1,058	1,131	20,497	7,273	8.2	14.5
1970		1,150	1,275				

Notes: a) Value of domestic production is given by the Ministry of Finance.
b) Not all imports are dutiable. NATO infrastructure, PL 480, and a variety of other miscellaneous categories are exempt from duty. However, figures on the amount of dutiable imports are not available for the entire period, so total imports were used for these computations.

Sources: 1952-1964 Ministry of Finance, General Directorate of Revenues, *Budget Revenues Bulletin No. 14*, Fiscal Year 1964, p. 124 (cols 1, 4, and 6), p. 130 (cols 2, 3, 5, and 7), 1965 to 1970. Tax receipts from *Social and Economic Indicators*, AID, 1971.

items on Lists I to III are almost exclusively imports and are thus taxed at rates above those applying to most domestic products.

There is no discrimination against imports, even for items on List IV, except insofar as the above considerations hold, or as the rates applicable to imports are above the average rate charged against domestic production, or if the commodity is domestically produced. Thus if an item on List IV were taxed at the average rate of all domestic products and there were no domestic production, the only discriminatory effect of the production tax would be the cascading of the tariff.

In addition to the conceptual difficulties just mentioned, production tax rates were revised substantially in 1956, 1963, and 1964, and only the lists and rates applicable for 1962 and 1964 are available (although the lists have not since been significantly altered).⁷

Table A-6 gives the lists applicable since 1964.⁸ Table A-7 gives data on collections from the import production tax, domestic production tax, customs duties, and comparable value-added figures for the period 1952 to 1969. As can be seen, the import production tax has yielded revenue over the years about equal to that from customs duties. Until 1964, moreover, import production tax revenues were generally slightly in excess of the domestic production tax revenues as far as absolute figures go, and have throughout constituted a considerably higher percentage of the taxable base. Thus part of the import production tax constituted additional protection against imports. It should be particularly noted that the amount of production tax levied against a dollar of imports increased automatically whenever the tariff, stamp duty or other charge against that import increased, since the production tax was levied against landed cost of the import in question.

The problem lies in separating the protective component of the production tax from that part offsetting taxation on domestic production. There is no perfect solution to the problem, and the one adopted here is at best only a first approximation. The production tax was levied only on imports of items on List IV, and thus constituted additional protection against imports. The entire amount of the production tax was treated as an additional duty.

For commodities on Lists I, II, and III, only the cascading component of the import production tax was regarded as adding to the EER. Thus for a commodity subject to a 20 per cent production tax levied on landed cost (including stamp duties, wharf charges, etc.) of twice the c.i.f. price, the protective component of the production tax is taken as equal to 20 per cent of the c.i.f. price, although the production tax as a per cent of c.i.f. price was

7. The lists and rates in effect in 1962 were found in I. Kızılkılı *et al.*, *Gümrük Giriş Tarifesi*, pp. 63 ff. There was little difference between these and the 1964 rates given in Table A-6. Some production tax rates were altered in 1970.

8. I am indebted to Professor Wayne Snyder for supplying these data.

40 per cent. While this procedure is somewhat arbitrary, no feasible method was found for a closer approximation to the protective component of the tax. It probably understates the protective content of the production tax for many imported items, and hence the resulting estimates of EERs are underestimates.

Stamp duty. Turkey levied a 5 per cent stamp duty on the c.i.f. value of imports in 1963. This duty was increased to 15 per cent in 1967, and to 25 per cent in 1969. It was reduced in August 1970 to 10 per cent. Unlike the wharf, municipality and production taxes, no cascading was involved as this duty was levied on the c.i.f. price of the imports.

Guarantee deposits. Since 1953, when a 4 per cent guarantee deposit was required with import license applications, there have been guarantee deposit requirements of varying heights and complexity. Guarantee deposit requirements never exceeded 10 per cent of the c.i.f. value of the goods for which import license application was made until 1962.⁹ Thereafter, the

9. An exception was the eight-month period following devaluation in 1958. See Chapter III, above.

Table A-8
Guarantee deposits required, by list, 1958 to 1970 (deposit as per cent of value of application)

	Quota List		Liberalized List	
	Importers	Industrialists	List I	List II
1958	20	—	—	—
1959	10-15	—	10	—
1960	10	—	10	—
1961	10	—	10	—
1962	10	—	10	—
1963	10-20	10	10-30	—
1964	30	10	30	30
1965	30	10	70	100
1966	30	10	70	100
1967	30	10	70	100-125
1968	30	10	70	100-125
1969	50	20	90	120-150
1970	50	20	90	150

Notes: a) Guarantee deposit requirements against AID-financed goods were lower than the ratios indicated here.

b) From 1966 on, there were a few goods subject to lower rates than those indicated.

Source: Data supplied by SPO.

height of the guarantee deposit rates and the complexity of the guarantee deposit schedules increased rapidly.

Table A-8 gives the rates required, under various categories, for the period since 1958. As can be seen, guarantee deposit requirements varied between the Quota List and the Liberalized List, as also between industrialists and importers. By 1964 the Liberalized List had been split into two, with separate guarantee deposit rates for each list, and additional rates applied to imports financed by AID licenses as well.

There are two problems with estimating the tariff equivalent of the guarantee deposits. First, there is the question of the interest foregone while guarantee deposits were tied up. That problem is not very difficult. The second problem, however, is considerably greater: the implicit cost of the guarantee deposit varied not only with the foregone interest, but with the length of time for which the guarantee deposit was held.¹⁰ Thus in 1966 the time for which the guarantee deposit was held was generally about 5 months, whereas by 1969 the guarantee deposit frequently was for 8 months or longer, as delays increased in the issuance of import licenses.

10. It also varied with the ratio of the value of license applications to receipts. No way could be found, however, to estimate variations in cost due to this factor.

Table A-9

TL cost of \$1 c.i.f. of imports for various guarantee deposit requirements, 1953 to 1970

Period	Guarantee Deposit Rate (per cent)	Length of Deposit (months)	TL Cost per Dollar	Per cent Tariff Equivalent
1953 and 1954	4	3	0.003	0.1
1955 to 1958	10	5	0.014	0.5
1959 to 1962	10	3	0.027	0.3
1963 to 1964	10	4	0.036	0.4
	20	4	0.072	0.8
	30	4	0.108	1.2
	40	4	0.144	1.6
1965 to 1968	10	5	0.045	0.5
	30	5	0.135	1.5
	70	5	0.315	3.5
	100	5	0.450	5.0
	125	5	0.563	6.3
1969 to August 1970	20	8	0.144	1.6
	50	8	0.360	4.0
	90	8	0.405	4.5
	120	8	0.864	9.6
	150	8	1.080	12.0

Sources: Table A-8 and text.

It is difficult to obtain anything other than an impressionistic basis for estimating the average length of time from the data guarantee deposits were made until the date of importation. The time period included the period during which the import license application was pending as well as the time between the placing of an order after receipt of import license and the time the commodity arrived in customs. Table A-9 gives the estimated TL costs per dollar of c.i.f. value of imports for various guarantee deposit rates and elapsed time between license application and receipt of imports. The estimate of the average length of time for which guarantee deposits were held at the Central Bank is given in the third column. Throughout the period since 1958 the borrowing rate in Turkey fluctuated between 12 and 15 per cent. The 12 per cent rate is used here to estimate the foregone interest (or borrowing costs) of the guarantee deposit requirements. The rates obtained in the final columns are those used below to compute EERs for various import categories.

Capital goods imports. Starting in 1964, a special provision was enacted (as part of Law 474 which revised customs duty rates) under which persons wishing to import capital goods could in some circumstances apply for and receive permission to pay customs duty, municipality tax, wharf tax and production tax (but not stamp duty) in five annual installments, subject to a 5 per cent rate of interest on their outstanding obligations. Since that interest rate was well below the borrowing rate, the provision when effective meant that the actual cost of duties and charges on capital goods imports was lower than their nominal value.¹¹

To be eligible for the deferred payment of import charges the would-be importer had to have his investment approved as being in accord with the relevant Five Year Plan. In practice most capital goods were imported under this provision, as the likelihood of obtaining a license for importation of goods judged not to be in accord with the development Plans was small. No data are available to indicate what fraction of all capital goods were imported under this provision, but the fraction was undoubtedly very high. In the absence of more detailed information, it is assumed that all capital goods were imported under the deferred payment scheme.

The value of the deferred payment can be computed as the difference between the duties presently payable (without deferment) and the present value of the repayment schedule discounted at 15 per cent. Thus per TL 100 of duties owed on capital goods import, TL 20 would be paid at the time of importation, TL 24 one year thereafter (TL 20 principal plus 5 per cent on TL

11. The provisions are cited in Muhittin Tanci, Polat Yalçınar, and Yavuz Kadioğlu, *İçtihatlı ve En Son Değişiklikleri Muhtevi Gümrük Kanunu ve İstatistik Pozisyonlarına Bölünmüş Gümrük Giriş Tarife Cetveli* (Ankara), 1968, pp. 109-23.

Table A-10
Gürtan's estimates of TL cost of \$1 of capital goods imports, 1953 to 1960

	1953	1954	1955	1956	1957	1958	1959	1960
Construction goods	3.58	3.76	4.25	4.55	6.16	7.56	13.81	13.94
Machinery and equipment	3.22	3.48	4.02	4.72	5.97	6.30	11.59	11.79
Average	3.34	3.57	4.10	4.68	6.03	6.55	12.06	12.14

Source: Kenan Gürtan, untitled, mimeographed by SPO.

80), TL 23 the year later, etc. If these future payments are discounted at 15 per cent, the present value of the deferred payments is TL 84.77. Thus the deferred payment scheme represented a 15.2 per cent reduction in duties and charges (except stamp tax) on imported capital goods.

At the same time as the law enabling postponement of duties payable on capital goods was effected, a provision was also enacted which enabled the authorities to waive duties on capital goods imports under specified conditions. No data are available on the value of capital goods imports for which duties were entirely waived. One obtains a distinct impression from interviews that until 1967 the provision was rarely used. Thereafter, however, the practice of waiving duties completely was believed to have become fairly general. In estimating the subsidy against duties and taxes upon capital goods imports in 1968, therefore, it was assumed that 75 per cent of all capital goods were admitted duty-free (although still subject to stamp tax), while the remaining 25 per cent were entitled to the postponement of payment of duties.

The reduction in tariffs and surcharges on capital goods started in 1964. For the period 1953 to 1960 a set of estimates of the total TL cost of foreign exchange for capital goods has already been prepared by Gürtan for the SPO. Since his estimates were based upon actual receipts by appropriate subcategories of capital goods (construction goods, and machinery and equipment separately), it was decided to use Gürtan's estimates of the TL cost of capital goods imports for the period prior to 1958.¹²

Import "exchange taxes" in the 1950's. As indicated in Chapter II, a se-

12. For other commodities, and for capital goods imports in the 1960's, the sample indicated in Table A-5 was used. Gürtan's estimates can be compared with the sample estimates for the 1950's:

	1954	1957	1959
Gürtan	3.57	6.03	12.06
Sample	4.13	5.38	12.55

These give some confidence in the method of estimating other EERs. See Note 2 to Tables A-11 to A-14.

ries of surcharges and "treasury taxes" were successively imposed upon various imported goods during the 1950's. In late 1953, non-cascaded taxes on a variety of "luxury" goods were imposed, ranging from 25 to 150 per cent of the c.i.f. price of the commodity. These surcharges remained in effect until August 1958.¹³ A "Treasury Tax" of 40 per cent on foreign exchange purchases went into effect on March 1, 1957, and was removed in December 1958.¹⁴

On the import side, EERs were thus fairly constant between 1954 and 1957, save for negligible changes in the tariff equivalents of guarantee deposits and occasional additions to the list of commodities subject to surcharges or changes in the rates of surcharge. The rates of additional duty on selected imports can be inferred from the "surcharge" column of estimates of import EERs for 1954, given in Tables A-11 to A-14.

Estimation of import EERs. Tables A-11 through A-14 provide estimates of EERs for the four categories of import goods for 1954, 1957, August 1958, 1962, 1965 and 1968. The first eight columns provide data for each period not contained in earlier Appendix Tables, and the last six columns give the EERs prevailing at each point in time expressed as a percentage of the c.i.f. price at the official exchange rate. To obtain EERs in TL, the numbers in the last six columns of Tables A-11 to A-14 can be divided by 100 and multiplied by 2.8 prior to August 1958 and by 9 thereafter.

Thus, BTN No. 5.10 (ivory, Table A-11) carried a 10 per cent duty (from Table A-5) in 1954 and was subject to the municipality tax. Its EER was 114, or 1.14 times the official exchange rate of TL 2.80 per dollar, thus TL 3.10. In 1957, ivory was subject to the 40 per cent Treasury Tax, the same tariff rate, and a guarantee deposit requirement. Its EER was thus 1.56 times the official rate, or TL 4.37. In August 1958, ivory had virtually the same proportionate EER (the guarantee deposit requirement was reduced) but at the TL 9 = \$1 exchange rate, that equaled TL 13.86. In 1962, ivory was eligible for importation by industrialists under a quota, and the 40 per cent Treasury Tax had been removed, giving it an EER of 1.14 times the exchange rate, or TL 10.26. After 1962, ivory was not on an eligible import list.

For commodities not on an eligible import list in the 1960's EERs were

13. Data on the commodities included, and the rate of surcharge, were obtained from Ragıp Rıfıkı Özgürel, *The Turkish Foreign Trade Regime and Decrees, List of Import and Export Articles and Regulations*, Ministry of Economy and Commerce, undated, p. 230.
14. *Annual Report on Exchange Restrictions*, International Monetary Fund (Washington), 1958, p. 293; 1959, p. 301. The 42 per cent figure appearing in the tables reflects the 40 per cent tax plus an estimated cost of guarantee deposits equal to 2 per cent of the c.i.f. price.

Table A-11
EERs for consumer goods imports, 1954 to 1968 (all expressed as per cent of c.i.f. TL price)

BTN No.	1954	1957	1962	1965	1968	EERs							
	Produc- tion Tax	Sur- charge	List	List	Stamp Duty	List	Stamp Duty	1954	1957 (Aug.)	1962	1965	1968	
5.10	-	-	42	QI				114	156	154	114		
7.06	-	-	42					161	203	201			
8.01	-	-	67	PQI	6	PQI+W	17	220	287	260	220	197	212
9.01a	48	-	42	QW	6	QWP	17	238	281	179	239	250	266
b	56	-	42					276	319	316			
9.02	-	-	42	L	9	LIP		190	233	231	191	229	
9.04	-	-	67	QW	6	QW	17	220	287	260	220	227	242
10.01	-	-	42					161	204	201			
17.01	-	-	42					220	287	260			
19.03	-	-	42					161	204	201			
20.05	-	-	42					279	321	319			
21.05	-	-	42					220	263	260			
22.03	90	-	42					268	411	409			
29.38	-	-	42	L	16	LIAID	19	108	150	140	108	124	130
34.01	18	-	67					238	305	278			
37.02	8	-	92	PQI	7	PL1,PQ	16	152	244	192	152	159	171
42.02	-	-	67					220	287	260			
43.03	222	75	117					517	559	482			
60.02	50	-	42					329	271	369			
62.02	40	-	67					261	328	301			

Table A-11 (continued)

BTN No.	1954		1957		1962		1965		1968		EERs					
	Produc- tion Tax	Sur- charge	Sur- charge		List		List		Stamp Duty	List	Stamp Duty	1954	1957 (Aug.)	1962	1965	1968
64.05	-	-	42									220	263	260		
65.05	-	-	42									185	227	230		
66.01	-	-	67									220	287	260		
67.04	-	-	42									220	263	260		
69.10	25	75	117		PQW							320	362	285	245	
71.12	-	75	117									201	243	166		
74.17	-	-	42									150	192	190		
83.01	-	-	42				PL2	10		PL2	20	161	204	201	201	215
85.02	-	-	42		LAID		PL2	10		PL2AID	30	161	204	201	161	171 195
90.07	7	25	67		PL		PL2	10		PL2PQW	20	170	212	185	145	214 229
91.01	10	50-75	92-117		QW		QWAID	11		QW	17	203	327	176	136	229 241
92.01	-	-	42		QW		QW	7		QW	17	120	162	160	120	168 182
94.03	-	50	92									247	289	237		
96.05	36	-	42									256	299	296		
97.02	-	75	117									220	337	260		
98.03	-	-	42		L					PQW+1	17	173	215	213	173	212
98.08	-	-	42		QW		PQ1+W	7				150	192	190	150	197
Average consumer good EER:												218	267	247	175	197 209

Notes: See statement following Table A-14.

Source: See statement following Table A-14.

Table A-12
EERs for raw material and intermediate goods imports, 1954 to 1968 (all expressed as per cent of c.i.f. TL price)

BTN No.	1954		1957		1962		1965		1968		EERs						
	Produc- tion Tax	Sur charge	Sur- charge	List	List	List	List	Stamp Duty	List	Stamp Duty	1954	1957	1958 (Aug.)	1962	1965	1968	
13.01			42	PQW	PQW	PQW	PQW	7	PQW	17	220	263	260	220	227	242	
15.12			42	PQWI	PQWI	PQWI	PL1	8	PQWI	17	173	215	213	173	182	194	
18.03	33		67	QW	QW	QW	QWI	6	QI	17	147	214	287	147	202	240	
23.04			42								120	162	160				
25.03	8		42				QWI	6	PQW	17	134	176	174	224	232		
25.19	17		42	QI	QI	QI	QI	6			132	174	172	132	137		
25.24	3		42	QI	QI	QI	QI	6	QI	17	149	191	189	149	141	155	
26.01	4		42	PQW	PQW	PQW	PQI	6	PQI	17	111	152	151	111	116	130	
27.01			42								118	161	158				
28.04			42	L	L	L	PL2	10	PL2	20	161	204	201	161	171	185	
28.06			42	L	L	L	L1	8	PL1	19	120	197	160	120	158	172	
28.09			42	PQI	PQI	PQI	PQW	6	QI	17	109	150	148	108	156	170	
28.19			42	L	L	L	L2	10	L1	19	114	156	154	114	136	148	
28.26			42	L	L	L	L2	10	PL2	20	120	162	160	120	130	143	
28.39			42	L	L	L	L1	8	L1	19	109	150	148	108	137	151	
29.06			42	L	L	L	L2	10	L2	20	132	174	172	132	142	155	
29.14			42	L	L	L	L2	10	PL2PQI	20	220	263	260	220	171	152	
32.03			42	QWI	QWI	QWI	PQWI	6			132	174	214	132	156		
35.02			42	L	L	L	PL1	8	PL1	19	138	180	196	138	146	160	
36.03			42	QI	QI	QI	QIP	5			161	204	190	161	226		
38.05	81	50	42	L	L	L	L2	10	L2	20	120	162	184	120	154	167	
39.02	12		92	PQI	PQI	PQI	PL1AID	16	PLAID	20	293	235	190	243	187	270	
40.01		25	22	LAID	LAID	LAID	PL2	10	PL1AID	25	174	196	166	184	170	189	
41.02			67								180	223	160				
44.15			42								150	192	235				

Table A-12 (continued)

BTN No.	1954		1957	1962		1965		1968		EERs						
	Produc- tion Tax	Sur- charge	Sur- charge	List		List		Stamp Duty	List	Stamp Duty	1954	1957	1958 (Aug.)	1962	1965	1968
45.03			42	QWI		QW		7	PQW	17	144	186	184	144	168	182
46.02			42								150	192	189			
47.01	18		42	QI		PLIP		8	PLPQI	18	126	168	166	126	151	164
48.16			42	PQWP							220	263	260	220		
50.04	45		42								195	236	235			
54.01	25		42								151	193	191			
55.04	27		42								154	195	194			
57.03	15		42	QI		QI		5	QI	17	123	165	163	123	129	143
68.13	17		42	QIW		QIW		5	PQIW	17	149	191	189	149	227	243
69.02	21		42	LP		L2P		10			171	213	211	171	191	
73.07	3		42	PQIP		QIAID		11	PQI	17	123	165	163	122	133	143
73.14	3		42	LP		PLIP		9	QI	17	123	165	163	122	151	163
73.26	4		42								136	178	212			
74.07	4		42	PQI		PQIW		6	PQW	17	119	161	159	119	162	188
75.03	6		42	L		L2		10	L2	20	132	174	174	134	151	166
77.02	3		42	L		L2AID		16	PL2	20	111	111	163	111	127	131
78.04	15		42								165	209	205			
79.09	11		42								149	191	189			
80.03	3		42	L		L1AID		16	PL1AID	25	111	152	163	111	134	147
82.02	33		67	L		PQW		6	PQIW	17	165	232	205	165	208	223
85.25	20		42	QW		PQW		6	PQIW	17	164	206	204	164	191	207
90.17			42	L		L2AID		16	PL1AID	25	120	162	160	120	160	172
Average EER:											148	191	187	146	164	183

Note: See statement following Table A-14.

Source: See statement following Table A-14.

Table A-13
EERs, capital goods imports (all expressed as percentage of TL c.i.f. values)

BTN No.	1954		1957		1962		1965		1968		EERs					
	Produc- tion Tax	Sur- charge	Sur- charge	List	List	Stamp Duty	List	Stamp Duty	List	Stamp Duty	1954	1957	1958	1962	1965	1968
76.08	30		42						Q	-67	150	192	190			139
84.06	11		42		LAID	1	PL2PQ1	-28	PL2PQW	-28	121	161	159	129	159	133
84.15	21	75	115		PLAID	-10	PL1PQI	-66	L1PPQI	-66	210	250	175	145	194	143
84.22	21		42		PL	-4	PL2PQW	-53	PL2PQW	-53	131	174	171	131	187	142
84.31	19		42		PL	7	PL2AID	-30	PL2	-30	128	170	168	128	169	136
84.37	19		42					-45	PQ1	-45	128	170	168			133
84.45	19		42			-8	QWP	-58	PQW	-58	128	170	168	183	137	
84.63	27		83		PLAID	-5	PL2AID	-30	L2AID	-30	135	219	175	145	167	146
86.06	21		42					-16	Q	-16	135	177	175			125
87.01	33		42			-5	QW	-26	PQWP	-26	165	207	205	167	141	
87.02	12	25-50	67-92		PL	-8	PQW	-69	PQWP	-69	200	243	202	162	195	140
88.02			42		PQ1	-2	PQW	10	PQWP	10	109	150	148	108	104	118
89.01			42					-40	Q	-40	161	203	201			130
90.27	33		42		L	-5	L2	-64	L2	-64	165	207	205	165	196	143
Average capital good EER:											148	192	179	139	172	136

Notes: See statement following Table A-14.

Sources: See statement following Table A-14.

Table A-14
EERs for imports competing with domestic production, 1954 to 1968 (all expressed as percentage of TL c.i.f. values)

BTN No.	1954		1957		1962		1965		1968		EERs					
	Produc- tion Tax	Sur- charge	Sur- charge		List	Stamp Duty	List	Stamp Duty	List	Stamp Duty	1954	1957	1958	1962	1965	1968
31.02			42		LP		PQIPL	16	LIPQI	29	161	204	201	161	141	158
40.11	34		42		PLAID		PQIW	6	PQWP	27	173	214	212	182	193	221
48.05	37		42		PQ		PQI	6	PQIW	17	210	252	250	210	216	232
51.04	83		67				PL2AID	16	PLIPQI	66	303	370	343		410	317
53.11	70	50	92								267	359	291			
55.06	48		67								221	288	261			
56.04	59		67		PQI						235	302	275	235		
56.06	83		67				PQI	5			303	370	343		309	
58.05	83		67		L		PL2PLI	9	PL1	19	303	370	343	303	312	330
60.01	83		92								303	395	343			
69.05	27		42								218	260	258			
70.05	41		42		PQW				PQI	17	203	245	247	203		225
73.32	36		42		PQW		PQW	6	PL2PQ	20	180	222	220	180	208	227
Average import substitution EER:											237	296	276	211	257	244

Notes: See next page.

Sources: See next page.

Notes: a) Symbols for the lists are:

Q = quota list

L = liberalized list

P prefix = part of the category eligible for importation

P suffix = commodity eligible for importation only with Ministerial permission

AID = AID-financing only

L1, L2 = Liberalized Lists 1 and 2 respectively

I, W suffixes = Industrialist, Importers eligible to import the commodity.

b) EERs computed as: $(1 + t_i + w + p_i + s + g_i)$,

where t_i is the tariff rate, w is the combined wharf and municipality tax rate in effect, p_i is the component of the production tax discriminating against exports, s is the stamp duty, m is the municipality tax, and g_i is the tariff equivalent of guarantee deposit requirements.

The wharf and municipality taxes were computed as $WT + MT = a + bti$

where WT is the wharf tax and MT the municipality tax. $a = 0.025$ until 1965 and 0.05 thereafter, $b = 0.17875$ until 1965 and 0.2075 thereafter. The relationship holds since $MT_i = ct_i$ and $WT_i = h(MT_i + t_i + 1)$, where c and g are the proportionate tax rates.

The production tax was computed as $P_i(1 + t_i + W)$ for goods on List IV and $P_i(t_i + W)$ for Lists I to III.

c) A blank for the 1960's indicates that the commodity was not on the eligible import list.

d) The stamp duty column for the 1960's contains the stamp duty and also the guarantee deposit requirement's *ad valorem* equivalent. For capital goods imports, the implicit value of the subsidy is subtracted. Thus some capital goods imports are reported to have a net negative stamp duty.

e) EERs for 1958 are expressed as a percentage of the c.i.f. price at the TL 9 = \$1 exchange rate.

f) Stamp duty rates were: 5 per cent from 1963 to 1965, 15 per cent from 1965 to 1968, and 25 per cent in 1969.

g) December 1958 EERs can be computed from August 1958 EERs by subtracting 0.4, since the Treasury Tax was removed at that time.

Sources: Production tax rates from Table A-6.

Tariff rates from Table A-5.

1954 surcharge rates from Özgürel, *op. cit.* (Note 13).

1957 surcharge rates from *ibid.*, with additions to reflect the 40 per cent general "Treasury tax" plus a 2 per cent guarantee-deposit-requirement equivalent.

List classifications for 1962, 1965 and 1968 are from Import Programs, Nos. 8 (1962), 14 (1965), and 20 (1968). (Note 3, Chap. VI.)

not calculated, since they would have been meaningless. The sole exception was capital goods imports for which special "investment goods quotas" had been set aside, so that failure to include a capital goods item on an import list did not necessarily imply that the product could not legally be imported.

The fact that some commodities in the sample were not legally importable in the 1960's and therefore excluded from the calculation of the mean EER for each commodity category imparts a bias to the sample means over time. For example, some import-substitute commodities subject to very high tariff rates were omitted from the 1968 import list, so that the calculated EER for that group actually declined from its 1965 value. However (1) in the event of a commodity not being included on a list, it was impossible to calculate any guarantee-deposit-requirement equivalent; (2) it becomes a moot question as to whether the import production tax rate applied; and (3) if the good had been eligible for importation, additional taxes might have been levied. It was decided in view of these considerations that the bias imparted by estimating the mean rate for goods actually eligible for importation was smaller than the bias that would have resulted from creating fictitious guarantee deposit requirements and otherwise making estimates of tax rates applicable to goods that actually could not be imported.

The average EERs for each import category, given in the last rows of Tables A-11 to A-14, are the unweighted means of the EERs for the commodities in the sample. As indicated above, no satisfactory set of weights could be found.

For the years between the dates for which data are presented, either (1) known changes in the trade regime were of an across-the-board nature, or (2) changes were very small or not known. Thus there is no evidence that any component of EERs for imports changed from 1954 until 1957, except for the production tax (for which data are not available) and for an insignificant change in guarantee deposit requirements. Between August 1958 and 1960 the only known change was the abandonment of the 40 per cent Treasury Tax, which reduced by 40 the EER for each commodity as measured in the tables, so that separate calculations did not have to be made. Between 1962 and 1963 the 5 per cent stamp duty was introduced. The 1954 tariff rates were assumed to continue in effect in 1964. From 1964 to 1965 changes reflect the altered tariff rates and the effect of their being cascaded by other charges. Between 1966 and 1967 the stamp duty was increased from 5 to 15 per cent. Between 1968 and 1969 the stamp duty rose from 15 to 25 per cent. These were across-the-board changes, and are reflected in the import EERs given in Table VI-10. There were undoubtedly small modifications in the system which are not reflected in those estimates. For example, the delay in obtaining licenses increased in 1969, and therefore the implicit interest cost of the guarantee deposit requirements increased. However, most such

phenomena were variable even within given years, and it is doubtful that they would alter the EER estimates significantly even if a means were available for estimating their effects.

Invisibles and capital transactions

Fortunately, the structure of rates on invisibles and capital transactions has been far simpler than that on imports. Three categories of invisibles require separate treatment: tourism, workers' remittances, and interest and dividends on foreign capital. Capital flows have essentially been kept at a uniform rate at each point in time.

Tourism. All tourist transactions took place at the TL 2.80 = \$1 rate until October 1956, when a TL 5.25 tourist rate was introduced applicable to foreign tourists' purchases of lira in Turkey. The selling rate for Turks' foreign travel was changed at that time to TL 5.75 per dollar.¹⁵ The rate was unified at TL 9 = \$1 in August 1958. That rate remained in effect for foreign tourists in Turkey until 1968. In 1961, however, Turks purchasing foreign exchange for travelling abroad were taxed at the rate of 50 per cent, making the EER TL 13.50. That rate remained in effect until August 1970. For foreign tourists, a special buying rate of TL 12 = \$1 was introduced in March 1968.¹⁶

Workers' remittances. Until the 1960's so few Turks worked abroad that there were no special arrangements for their remittances. But by the mid-1960's Turkish workers abroad constituted an important source of foreign exchange earnings, and special provisions were made for their remittances. In 1965 it was decreed that Turkish workers who remitted their foreign exchange to the Central Bank could immediately receive 3 years' interest (not compounded) on their deposit, which could be withdrawn at any time. Thus the rate at which workers remitted was effectively TL 11.43, since the interest rate was 9 per cent. In 1968 the workers' remittance rate was increased to TL 12, as the interest rate was raised to 11.11 per cent. Thus the EER became 12 in 1968 and rose only to TL 15 with the August 1970 devaluation. This was done by continuing to prepay interest, and setting the workers' remittance rate at TL 10 per dollar.

One other feature of workers' remittances deserves mention: returning workers were entitled, under most conditions, to import a car when they

15. *Annual Report on Currency Restrictions*, International Monetary Fund (Washington), 1957, p. 279.

16. *Annual Report on Currency Restrictions*, International Monetary Fund (Washington), 1969, p. 470.

Table A-15
EERs on invisible and capital transactions, 1953 to 1969 (TL per dollar)

	Tourism		Workers' Remittances	Dividends and Interest	Other Invisibles	Capital Transactions
	Buying	Selling				
1953	2.80	2.80	2.80	2.80	2.80	2.80
1954	2.80	2.80	2.80	2.80	2.80	2.80
1955	2.80	2.80	2.80	2.80	2.80	2.80
1956	5.25	5.75	2.80	2.80	2.80-5.75	2.80
1957	5.25	5.75	2.80	2.80	2.80-5.75	2.80
1958	9.00	9.02	9.00	9.00	9.00	9.00
1959	9.02	9.04	9.00	9.00	9.00	9.00
1960	9.02	13.50	9.00	9.00	9.00	9.00
1961	9.02	13.50	9.00	9.00	9.00	9.00
1962	9.02	13.50	9.00	9.00	9.00	9.00
1963	9.02	13.50	9.00	9.00	9.00	9.00
1964	9.02	13.50	9.00	9.00	9.00	9.00
1965	9.02	13.50	11.43	9.00	9.00	9.00
1966	9.02	13.50	11.43	9.00	9.00	9.00
1967	9.02	13.50	11.43	9.00	9.00	9.00
1968	12.00	13.50	12.00	9.00	9.00	9.00
1969	12.00	13.50	12.00	9.00	9.00	9.00

Source: *Annual Report on Currency Restrictions*, International Monetary Fund (Washington), various issues.

returned to Turkey.¹⁷ Since the car was legally resellable, either *de jure* or *de facto*, a sizeable profit could be made. To be eligible for the privilege, the workers (or other Turks working abroad) had to demonstrate foreign savings in the minimum amount of \$800. Thus they had to show a Central Bank deposit of at least that amount. Since the profitability of importing a car was generally sizeable, the EER for the first \$800 of remittances considerably exceeded the TL 11.43 or TL 12 rate. However, once minimum savings were deposited, the incentive to deposit additional remittances hinged only upon the prepayment of interest, and the marginal EER was considerably below the average. For present purposes, however, it is the marginal rate, above the minimum savings rate, which is used in estimation of the EER's.

Profit and interest remittances, and foreign capital transactions. Inter-

17. *Annual Report on Currency Restrictions*, International Monetary Fund (Washington), 1967, p. 622. In 1968, the importation privilege was slightly restricted in that the importer had to show he had owned the vehicle for six months.

est, dividends and profit remittances, as well as capital repatriation were blocked after World War II. A Law for the Encouragement of Foreign Investment was passed in 1951 which guaranteed that foreign investors coming under the scope of the law would be entitled to repatriate 10 per cent of the investment annually in the form of profits, interest, dividends or capital repatriation. The 10 per cent ceiling was removed in 1964. Virtually all private capital flows since 1951 have come under those provisions and hence remittances have generally been legal.¹⁸ Both foreign loans and foreign investment required government approval, and once it was received, came under the scope of the Law.

The TL 2.80 exchange rate was in effect for these transactions until August 1958. In 1956 patents, royalties, licensing fees and capital transfers of foreign companies not coming under the provisions of the Law for Encouragement of Foreign Investment were made subject to the TL 5.75 exchange rate. Except for that category, however, capital transfers and remittances have been made at the official exchange rate throughout the period under study.¹⁹ Table A-15 summarizes the EERs for invisible and capital transactions.

18. Companies earning more than 10 per cent, of course, experienced partial blockage of their earnings. In the 1960's special categories of investment, such as tourism, were established. Foreign companies could invest in those categories and repatriate additional sums under those circumstances.
19. One exception is the foreign oil companies which were guaranteed that they could repatriate part of their earnings at the TL 2.80 exchange rate, which continues in effect.

APPENDIX B

CALCULATION OF FACTORS RESPONSIBLE FOR TURKEY'S DECLINING EXPORT EARNINGS, 1954 TO 1958

There are two alternative bases on which one can decompose the changes in a country's export earnings. First, one can form the identity:

$$\begin{aligned} \sum_i P_{it} X_{it} - \sum_i P_{io} X_{io} &\equiv \sum_i (P_{it} - P_{io}) X_{io} + \sum_i P_{io} (X_{it} - X_{io}) \\ &\quad + \sum_i (P_{it} - P_{io}) (X_{it} - X_{io}) \end{aligned} \quad (B1)$$

where P_i is the price of the i th export commodity, X_i is the quantity of the i th good exported, and o,t subscripts refer to the initial and terminal periods. The first term on the right can be identified as the part of the change in export earnings attributable to price changes, the second term as the part attributable to quantity changes, and the last term as the result of interaction between price and quantity changes. A positive sign for the first two terms suggests that prices and quantities increased.

Second, one can use "shift and share" analysis. Then,

$$\sum_i (V_{it} - V_{io}) \equiv \sum_i s_{io} W_{it} + (s_{it} - s_{io}) W_{it} \quad (B2)$$

where V_i is the value of exports of the i th commodity, s_i is the Turkish share of world exports of the i th commodity, W_i is the value of world exports of the i th commodity, and o,t subscripts refer to the initial and terminal periods. In this formula, the left-hand side refers to the change in the total value of exports. The first term on the right indicates what exports would have been if the initial share of each commodity market had been maintained, while the second term reflects the change in share of exports.

Neither decomposition of the change in export earnings has a sound underlying theory. Both formulations reflect identities, and in that sense, neither can be given a "causal" interpretation.¹ Thus in eq. (B1), it might be that the quantity change was positive and the price change negative simply because a country was selling more at a lower price, and conversely. However, both formulations are useful in exploring the proximate factors accounting for changes in export earnings.

1. See J. David Richardson, "Constant-Market-Shares Analysis of Export Growth," *Journal of International Economics*, May 1971.

Tables B-1 to B-4 give the data and commodities which were used to compute the terms in equations (B1) and (B2). As can be seen, the commodities included in the computations cover over 80 per cent of Turkey's export earnings in 1953. Although the figures are given in TL, the exchange rate used to record exports was constant throughout the period. Dollar figures can be obtained by dividing by 2.8.

Table B-1
Actual commodity-specific export earnings, 1953-1958 (millions of TL)

	1953	1954	1955	1956	1957	1958
Wheat	164.3	188.3	35.0	49.7	0	7.7
Barley	34.9	6.7	15.4	25.1	0	15.8
Cereal n.e.s.	24.0	10.2	3.2	4.1	6.5	n.a.
Dried fruit	95.2	120.7	166.2	55.8	64.5	63.8
Oilseed cakes	23.4	25.0	29.8	30.9	20.4	15.9
Tobacco	238.7	240.5	249.2	261.9	388.8	235.9
Wool	31.4	24.4	30.8	27.0	40.8	n.a.
Cotton	220.3	146.8	128.2	73.5	116.0	62.7
Chrome	79.1	43.4	55.6	65.1	59.9	51.6
Copper	33.3	20.7	24.6	47.6	24.2	18.1
Value	944.6	826.7	738.0	640.7	721.1	518.8
All exports	1109.0	937.8	877.3	854.0	966.7	626.3

Source: See Table B-4.

Table B-2
Exports with actual prices, 1953 volume, 1953-1958 (millions of TL)

	1953	1954	1955	1956	1957	1958
Wheat	164.3	120.1	132.1	168.2	138.1	138.1
Barley	34.9	20.7	25.5	24.0	20.8	16.0
Cereal n.e.s.	24.0	20.0	49.5	20.0	55.8	55.8
Dried fruit	95.2	85.9	133.1	67.7	65.4	74.1
Oilseed cakes	23.4	109.7	95.3	27.7	25.3	16.9
Tobacco	238.7	267.4	297.6	309.0	314.8	301.1
Wool	31.4	32.3	29.8	37.1	66.7	66.9
Cotton	220.3	243.9	244.9	213.7	192.5	183.4
Chrome	79.1	81.4	67.9	67.9	67.9	67.7
Copper	33.3	31.3	35.9	43.9	29.4	25.1
Value	944.6	1012.7	1111.6	979.1	976.7	945.1
Ratio to actual	1.00	1.22	1.50	1.53	1.35	1.82

Source: See Table B-4.

Table B-3
Exports with actual volume, 1953 prices, 1953-1958 (millions of TL)

	1953	1954	1955	1956	1957	1958
Wheat	164.3	256.5	43.2	47.7	0	9.0
Barley	34.9	11.0	20.5	35.8	0	34.5
Cereal n.e.s.	24.0	12.5	1.6	5.0	2.8	-
Dried fruit	95.2	133.4	119.2	78.8	93.4	81.9
Oilseed cakes	23.4	5.2	7.2	25.3	18.7	21.6
Tobacco	238.7	214.4	199.8	202.1	294.7	186.8
Wool	31.4	23.7	32.5	23.7	19.3	-
Cotton	220.3	132.7	115.4	75.8	132.7	75.6
Chrome	79.1	42.8	67.1	74.9	68.5	61.1
Copper	33.3	22.0	22.7	36.1	27.4	23.9
Total	944.6	854.2	629.2	605.2	657.5	516.6
Ratio to actual	1.00	103.3	0.852	0.943	0.912	0.996

Source: See Table B-4.

Table B-4
Exports with constant shares, 1953-1958 (millions of TL)

	1953	1954	1955	1956	1957	1958
Wheat	164.3	124.3	125.2	183.7	168.8	152.9
Barley	34.9	24.1	29.4	40.9	37.5	39.2
Cereals n.e.s.	24.0	16.8	27.7	33.3	19.3	28.8
Dried fruit	95.2	112.0	108.6	103.3	105.3	116.8
Oilseed cakes	23.4	38.4	44.8	49.0	42.6	43.1
Tobacco	238.7	240.5	247.8	267.7	336.0	357.3
Wool	31.4	28.8	29.7	31.4	38.6	26.6
Cotton	220.3	248.6	178.6	213.9	271.9	219.5
Chrome	79.1	74.8	74.8	97.4	135.2	157.9
Copper	33.3	30.8	40.0	49.0	42.0	50.4
Total	944.6	939.1	906.6	1069.6	1197.2	1192.5
Ratio to actual	1.00	1.13	1.23	1.67	1.66	2.29

Notes: Exports of cereals n.e.s. and wool were not separately reported for 1958. 1957 figures for those commodities were used to compute totals for 1958.

Source: Values and quantities from *Yearbook of International Trade Statistics*, United Nations, various issues. Unit values derived by dividing value by quantity. Computed values as indicated in text.

Table B-2 gives the value exports would have had had the volume of each export remained constant at its 1953 level, while unit prices assumed their actual recorded values. In a sense, the sum over the commodities examined of export values gives an indication of the weighted change in export prices over the 1954-to-1958 period. If volume had retained its 1953 level for each export commodity, Turkey's export earnings would have increased through 1955, and would have remained above their 1953 level in each year under examination. Thus there is no way to attribute the decline in recorded export earnings to a deterioration in prices received by Turkey for her major exports.

The last row of Table B-2 gives the ratio of export earnings with volume constant to actual exports. With constant export volumes, export earnings would have been 50 per cent greater than they actually were in 1955 and 1956, and 35 per cent greater in 1957, even with no growth in the volume of exports and actual prices.

Table B-3 gives the values exports would have had with constant (1953) prices and the actual volume of exports. With constant prices, Turkey's exports would have declined even more than they in fact did. Actual export earnings in every year after 1954 were greater than they would have been had there been no changes in export prices. In an index-number sense, the weighted average price received by Turkey for her exports increased from 1953 to 1958.

Table B-4 indicates the value Turkey's exports would have assumed if the Turkish share of world exports of each commodity had remained constant. While it may be argued that Turkey might not have been able to expand her share of world exports without a reduction in price received, it is difficult to accept that argument for constancy of share, especially since the shares were computed on a value basis. Moreover, Turkey's share in international trade for the commodities listed ranged from 3.0 per cent for dried fruit to 1.8 per cent for copper. In none of these export groups was Turkey's share of the market very large. It seems reasonable in a growing market to assume that a country could maintain her share of the market without suffering terms-of-trade losses. Had Turkey maintained her share in each of her commodity markets, Turkish export earnings would have grown 23 per cent over the period 1953-to-1958, contrasted with an actual decline of 43 per cent.

The decline in export earnings can now be decomposed in accordance with (B1) and (B2). For the commodities in the sample,

$$-425.8 = +0.5 \quad -428.0 \quad -1.7 \quad (B1)$$

total change price change quantity change interaction

$$-425.8 = 247.9 \quad -673.7 \quad (B2)$$

total change share constant change in share.

Thus in a definitional sense the decline in export earnings resulted entirely from a reduction in export volumes, which was slightly offset by an increase in average price. Similarly, the Turkish loss in share of world markets exceeded the decline in export earnings.

APPENDIX C

THE 1970 DEVALUATION

In August 1970 the Turkish lira was devalued *de jure* and *de facto*. Although the writing of the main chapters of this book continued into 1972, the work was based on research completed early in 1971. At the time this Appendix was drafted (September 1972) enough facts were available to permit at least a broad description of the events leading up to and following the 1970 devaluation. No analysis undertaken only two years after the event can be definitive, especially in view of the fact that data are far from complete, even for 1971. The conclusions stated here then should be regarded as tentative.

An interesting aspect of the devaluation is its remarkable superficial resemblance to the 1958 experience. The outcome, however, has been surprisingly different, though it nevertheless appears to substantiate much of the analysis of earlier chapters.

The nominal devaluation was a two-thirds increase in the price of foreign exchange, from TL 9 to TL 15 to the dollar.¹ As in 1958, though, the stamp duties and certain other surcharges upon its imports were reduced while the exchange rate for most traditional exports was set at TL 12 per dollar. Thus the effective devaluation was considerably less than the nominal one. Simultaneously with the exchange rate-alteration some domestic taxes were significantly increased, the prices of a number of products sold by public enterprises were raised sharply, and foreign credits were extended to Turkey.

The effects of the devaluation upon Turkey's balance of payments and domestic economic activity were much more immediate than those of 1958, and contrast sharply with them. On the international payments side, export earnings rose rapidly, workers' remittances increased beyond the most optimistic expectations, and despite a massive liberalization of imports Turkey's foreign exchange reserves rose sharply, reaching \$772 million at the end of 1971 contrasted with \$477 million in July 1970.

Domestically the release of funds previously frozen in guarantee deposits plus the increase in the money supply resulting from increased foreign exchange receipts (especially workers' remittances) led to a rapid increase in the

1. When the dollar was devalued in December 1971 the Turkish lira retained its parity with continental European currencies and the dollar exchange rate became TL 14 per dollar.

price level, and despite some political uncertainties, to be discussed below, real GNP increased 9.2 per cent in 1971, according to provisional estimates by the SPO. That was the second highest real growth rate attained during the planning years. While the 1958 devaluation was followed by price stability and recession, with little immediate export response, the 1970 devaluation was followed by inflation, a rapid expansion of output, and a large increase in foreign exchange earnings from exports and other sources.

Before turning to more detailed consideration of the devaluation, the political events of 1969–1971 should be mentioned. There is again a strong superficial resemblance to 1958 and its aftermath. Elections had been held in October 1969, and the Justice Party under the leadership of Prime Minister Demirel was returned to power, receiving 46 per cent of the popular vote, compared to 52 per cent in the 1965 elections. Throughout 1969, 1970 and early 1971 there was increasing political violence in Turkey, with clashes between left and right wing extremists. Frequent encounters between students and police took place on several university campuses, and despite efforts of the government to handle the situation, violence continued. These events were so much at the center of political discussion that the devaluation went almost unnoticed.² By March 1971 the Turkish military intervened and informed the Prime Minister that he could either resign or face a military coup.³ Demirel resigned, and a new government under Nihat Erim as Prime Minister was formed with the approval of the Turkish military leadership. Two Erim governments followed. The first lasted until December 1971 and the second until May 1972, when the Prime Minister resigned. The next government, under Ferit Melen as Prime Minister, again had military backing, although Parliament and political parties continued to function.

The Erim and Melen governments both imposed martial law and made strenuous, generally successful, efforts to stop the violence, with arrests and convictions of many suspected of encouraging the students or participating in the violence. Several changes in the administration of economic policy occurred under the first Erim government, the most important effect of these changes being that there was considerable uncertainty in the private sector as to the new government's intentions. Specifically relating to the trade regime, export price checks were resumed and rigorously enforced for a period of

2. The EIU has indicated that the devaluation strengthened Prime Minister Demirel politically, although many observers of Turkish politics disagree, believing that devaluation was a relatively unimportant issue at that time: EIU, *Op. Cit.* (Note 1, Chap. II), No. 3, September 1970, p. 2. The Prime Minister's proposed budget had been defeated in Parliament early in 1970, as several members of the Justice Party defected, but a new cabinet was formed at that time. The basis upon which the EIU formed its judgement is unclear.

3. *Middle Eastern Journal*, Summer 1971, p. 385.

several months, from May through the summer of 1971. In May and June there were widespread reports that goods were piled up at the docks awaiting price checks prior to export, since the government did not have the capacity to inspect all shipments promptly. But with the second Erim government most business uncertainty appeared to have ended. Although Ministers of both Erim governments made strong statements about intentions of major economic reforms, little of a substantive nature had been accomplished in that direction by the summer of 1972.

Thus the years 1969–1972 were a period of political change and unrest, and political questions occupied everyone's attention. But the causes of this preoccupation lay in factors essentially unassociated with the trade and payments regime or changes in it. Even the rapid price increases of 1971 and 1972, which were naturally very unpopular, did not become a major political issue, because the more important basic questions regarding the relationship of civilian politicians to the military occupied the center of the stage.

I. The situation pre-devaluation and the devaluation decision

As seen in earlier chapters, the premium on import licenses was rising almost continuously from 1964 to 1970. Liberalized List imports were the hardest hit, for approval of license applications was delayed. Moreover, even when licenses had been granted, currency transfers were delayed until foreign exchange became available. By late 1969, at the peak export season, it was estimated that the delay in transfer even under quota allocations was 30 weeks for industrialist, and 43 weeks for importers, reflecting about \$300 million of import licenses which had been issued but for which no foreign exchange was available. That represented half of expected 1970 export earnings.⁴ By June 1970 delays were even longer, and there were widespread reports of shortages of imported intermediate goods, especially steel products.⁵ It was generally believed that these shortages would prevent the attainment of the goals set forth in the 1970 Annual Program.

Earlier recommendations for devaluation had been made by the IMF, OECD and other agencies, and there had been repeated discussions of devaluation within Turkey for several years. Some outside observers had expected the Prime Minister to announce a devaluation immediately after the 1969 elections, but when he did not do so expectations of a devaluation subsided somewhat.⁶ In a sense, the fact that foreign exchange shortage had continued

4. EIU, *op. cit.* (Note 1, Chap. II), No. 1, March 1970, p. 3.

5. *Ibid.*, No. 2, June 1970, p. 6.

6. When several deputies of the Justice Party left the party after the 1969 elections, they stated publicly that they had opposed an earlier devaluation proposal put forth by Prime Minister Demirel.

for so long meant that it could continue longer. The EIU reported in June 1970 that "there is now far less support for an early devaluation," and later termed the timing of the devaluation a "surprise."⁷

When the decision to devalue was made in August 1970, the situation was by no means as severe as that prior to August 1958, and external pressures were certainly less. The role of foreign donors in influencing the decision to devalue is unclear. The Consortium did not meet to make its 1970 pledges until July, and sizeable credits were extended to Turkey after the devaluation.⁸ One of the arguments the Prime Minister made in defending the decision was that foreign loans were available as a result. It seems likely that the Consortium and its members had merely helped persuade the Prime Minister and others of the desirability of devaluation instead of making it a precondition of aid renewal, and that the timing was essentially a domestic political decision. Prime Minister Demirel appears to have been convinced for some time that the lira should be devalued but had been unable to do so due to opposition from within his own party. The industrialists in particular opposed the move, and they were among the key supporters of the Justice Party. The devaluation was announced shortly after Parliament had adjourned, which suggests that the timing may have been influenced by that fact. The factors influencing the Prime Minister in his decision are unclear. With heightened emphasis on growth during the 1960's the foreign exchange constraint was certainly viewed as a bottleneck to growth, and reported disruptions of production resulting from transfer delays and import shortages may have influenced the Prime Minister's attitude. After 1968, the SPO had emphasized the promotion of non-traditional exports, and export incentives had clearly met with some success. Devaluation was certainly consonant with the emphasis on new exports, and was probably an important factor influencing the Prime Minister's thinking.⁹

II. The devaluation package

When the exchange rate was altered in the summer of 1970, additional incentives for non-traditional exports were simultaneously established through changes in the rebate system, export credits and replenishment schemes. At the same time various changes in domestic policy took place. We

7. EIU, *op. cit.* (Note 1, Chap. II), No. 2, June 1970, p. 7; and No. 3, September 1970, p. 6.

8. *Ibid.*, No. 3, September 1970, p. 13.

9. Betty S. Yaşer, "Economic Aspects of the Devaluation of the Turkish Lira of August 10, 1972," *Discussion Paper No. 5*, AID (Ankara), April 1972, p. 2.

Table C-1
Effective exchange rates, pre- and post-devaluation, 1970

	July 1970 (TL per dollar)	September 1970	Per cent Increase
<i>Exports</i>			
Traditional exports	9.38	12.00	27.9
Non-traditional exports	10.52	16.50	56.8
<i>Imports</i>			
Capital goods	13.16	19.68	49.6
Consumer goods	19.69	30.00	52.3
Intermediate goods	17.05	23.92	40.3
Imports with domestic substitutes	22.88	35.50	55.2
<i>Tourism</i>			
Buying TL	12.00	15.00	25.0
Selling TL	13.50	15.00	11.0
<i>Other invisibles and capital</i>	9.00	15.00	66.7

Notes: a) Import EERs were estimated by taking the pre-devaluation ratio of the EER to the old exchange rate, subtracting 0.15 and the guarantee deposit *ad valorem* equivalent, and multiplying by the new exchange rate.
b) For intermediate goods imports, it was estimated that the reduction in duties on steel products reduced the weighted EER by 10 percent.

Source: Appendix A for pre-devaluation data. Estimates for post-devaluation imports are the author's. Other post-devaluation data from text.

consider first the nominal and effective devaluation, and then the changes in domestic policy. Although foreign credits were received as part of the package and imports were substantially increased, those components of the overall policy change will be reviewed later, when considering the effect of devaluation.

Nominal and effective devaluation

Table C-1 summarizes the changes in nominal and effective exchange rates that took place in August 1970. There were several exchange rates implicitly in effect prior to 1970: the commodity exchange rate (TL 9 per dollar), the workers' remittance and tourist buying rates (TL 12 per dollar), and the tourist selling rate (TL 13.5 per dollar), applicable to Turkish residents wishing to purchase foreign exchange for foreign travel abroad. The latter rates had been created by laws which provided subsidies and taxes outside of the foreign trade regime. The three rates were equalized *de facto* at the TL 14.85

= \$1 buying rate and TL 15 = \$1 selling rate.¹⁰

On the import side, the stamp duty was reduced from 25 to 10 per cent, and guarantee deposit requirements were reduced by 50 per cent. The latter measure significantly reduced the cost of imports both directly and also because the delay in importing was reduced sharply. An import costing \$1, subject to 100 per cent duty, had a landed cost of TL 22.8 pre-devaluation, and TL 35.6 post-devaluation, for a 56 per cent increase in the EER. An item subject to a 25 per cent duty had cost TL 14.87 pre-devaluation and cost TL 21.93 post-devaluation, for a 47 per cent increase in the EER. Thus the range of increase in individual import EERs was between 47 and 56 per cent, except for some intermediate steel products for which duty exemptions were granted with devaluation.¹¹ The net result, as indicated in Table C-1, was an increasing spread in import EERs, as capital goods and intermediate goods became slightly cheaper relative to consumer goods and to imports of goods also domestically produced.

The TL 15 = \$1 exchange rate applied to all export commodities except cotton, figs, fig cakes, hazelnuts, molasses, oilcakes, olive oil, raisins and tobacco. Those commodities, of course, constitute the majority of Turkish exports. The ratio of the export EER to the import EER for non-traditional goods thus increased somewhat, and the degree of discrimination against export was slightly reduced. An exchange rate of TL 12 = \$1 was set for the traditional commodities, but the government promised to gradually raise that rate to parity. The stated reasons for the lower exchange rate were that those exports were, in any event, competitive, even at the old exchange rates; and an increase in the exchange rates to TL 15 all at once would have resulted in unwarranted price increases. The rate for traditional exports was increased to TL 13 = \$1 in July 1971.¹²

The Central Bank set up a "Foreign Exchange Equalization Fund" with the profits on the difference between its foreign exchange purchases and sales. The Fund was to be used to finance exports, although by 1972 the proceeds went directly to general government revenue. Yaşer estimates that

10. *De jure*, the workers' remittance rate became TL 11.25 = \$1, with a 33 $\frac{1}{3}$ per cent subsidy still in force, and the Turkish travel rate became TL 10 = \$1, with a 50 per cent tax upon it. The limit to the amount of foreign exchange that Turks could buy was \$200, increasing to \$400 in 1971.
11. The products were: cast iron products, ferro-alloys, scrap iron blooms, billets, steel bars, sheet iron in rolls, iron and steel rods and beams, high-carbon steel products and iron ore. Ministry of Industry permission was required. See Yaşer, *op. cit.* (Note 9), p. 22.
12. The tobacco rate had been increased in January 1971. The hazelnut rate was raised to TL 14 per dollar in March 1972. Since the TL was revalued to TL 14 per dollar in December 1971, the remaining disparity for other commodities was TL 1 per dollar.

for the five months when the fund was operative in 1970, revenues were TL 585 million.¹³

Rebate rates and the import replenishment scheme were altered for manufactured exports. A two-tier system was established for export rebates, with those firms exporting over \$1 million entitled to rebate rates higher (ranging from 25 to 40 per cent) than those with smaller export values (up to 30 per cent). The intent of the two-tier system was of course to encourage larger export volumes and to foster consolidation of small exporting firms.¹⁴ The new rebate rates were somewhat lower than the old, although the highest export EER (TL 21 = \$1) was increased. The stated intention was "to lighten the burden on the budget."¹⁵ The new import replenishment scheme allowed exporters 25 per cent of expected export earnings for importing goods needed in production.

The provisions for export credit and for interest rates payable by exporters were also altered. Not only was the Foreign Exchange Equalization Fund established, but 50 per cent of guarantee deposits and the interest earned on them were set aside for export credits. Interest rates for exporters were reduced, but there are a number of reasons for questioning the likely effectiveness of the scheme.¹⁶

Domestic policy changes

Several changes in domestic policies accompanied the changes in EERs. Some were passed by Parliament prior to devaluation and others were undertaken with devaluation. They included: changes in tax rates and imposition of new taxes, some changes in domestic price policies, and alteration in the general structure of interest rates. Some of the changes were very detailed and had little short-run impact. In other cases, subsequent economic policies eroded or offset the effects of the initial measures. Thus a brief description of the initial changes will suffice.

Taxes. In addition to changes in the stamp tax, higher production taxes were imposed on petroleum products and stocks, and taxes upon new construction were levied. A variety of miscellaneous new taxes were imposed: on the purchase of vehicles, on capital gains from real estate, and on sales of certain service and luxury goods (furs, TV, hotels, restaurants, etc.). Produc-

13. Yaşer, *op. cit.* (Note 9), p. 24.

14. No data are available to this author on the actual rebates given or rates applicable to individual export commodities since devaluation.

15. Quoted in Yaşer, *op. cit.* (Note 9), p. 22.

16. The system of export credits and subsidized interest rates is extremely complex, and need not be dealt with in detail. See *ibid.* for analysis of it.

tion tax rates were altered and, importantly, assembly industry production became subject to the production tax. A variety of other taxes (legal fees, documents, etc.) were likewise increased.

Data are not available to evaluate accurately the aggregate importance of the tax changes. Consolidated budget revenues from the 1971 budget are estimated to have increased from TL 14.4 to TL 18.5 billion. Of that increase, TL 2 billion, or half, came from import revenues and an additional TL 800 million came from the petroleum production tax.¹⁷ In view of the Turkish inflation of 1971, it would appear that other tax changes were relatively small in their aggregate impact, although many Turks believe that the tax on new construction depressed building starts.

Price policy. Government pronouncements following devaluation made it clear that the danger of inflation was recognized and that the government would adopt strong measures to combat it. The Prime Minister made strong statements that the prices of SEE products would not be increased, and that private sector firms unduly raising prices would be subject to various sanctions, including loss of incentives (exemption from duties on capital goods imports, investment priority status, and the like), "restrictions in their activities within the framework of the Foreign Trade Regime," and even imprisonment.¹⁸

Despite these statements of intent, actual government policy was less than determined both in August 1970 and afterwards. Several price increases were announced in August 1970. They included sugar, fertilizers, and agricultural support prices for wheat (6.3 per cent), hazelnuts (13.3 per cent), raisins (4.3 per cent), figs (17.5 per cent), cotton (18.5 per cent), and olive oil (23.8 per cent). In May 1971 the prices of a wide variety of SEE products were increased sharply. As will be seen below, all these increases combined with government fiscal policy and a favorable harvest in 1971 to produce sizeable inflationary pressure in the eighteen months following devaluation.

Interest rate and credit policy. One of the steps taken with devaluation was a series of measures to increase the availability of credit to exporters and to reduce the interest rate paid by exporters. Those measures were part of a general overhaul of interest rates put into effect at that time. It resulted in a complex structure of twenty-eight different types of subsidies payable to banks for extending various categories of credit. At the time of writing, there are no data available with which the effectiveness of the scheme can be

17. Data from budget figures.

18. Speech of Prime Minister Demirel, quoted by Yaşar, *op. cit.* (Note 9), p. 19.

assessed, although there are grounds on which one can question whether the revisions will accomplish their desired goals.¹⁹

III. The effects of the devaluation

It is far too early to assess the overall impact of the devaluation package. Early results suggest that the devaluation was "successful" in improving the balance of payments, generating increased export earnings and liberalizing the import regime. It was less successful in terms of domestic price stability, although a large part of the resulting inflation originated from factors not necessarily associated with devaluation. We consider first the balance-of-payments performance, and thereafter evaluate the effects on the domestic economy.

Balance-of-payments performance

Table C-2 gives Turkey's balance of payments for the years 1969 to 1971. Exports by commodities are given in the top part of the Table. Exports rose from \$537 million in 1969 to \$677 million in 1971, for a 26 per cent increase in two years. That was well above expectations: the 1971 Annual Program projected 1971 exports at \$640 million. The bulk of the increase was from 1970 to 1971, with cotton exports accounting for \$51 million out of the \$59 million increase between 1969 and 1970. The post-devaluation increases were in exports of industrial products (\$36 million), cotton (\$20 million), other crop exports (\$18 million, of which \$12 million was in fresh fruits and vegetables) and livestock products (\$11 million). Hazelnuts, tobacco and mineral exports appear to have been relatively unaffected. As mentioned above, the first Erim government reinstituted export price checks for several months in the summer of 1971. The 1971 export performance is all the more remarkable in light of the uncertainties engendered by that episode.²⁰

Consistent with the findings of Chapter VII, increases in the export EER appear to have had their greatest initial impact on non-traditional exports. The year 1971 saw an exceptionally good harvest, so that part of the increase must be attributed to good weather. But the response of industrial exports cannot be attributed to weather, and tends to substantiate earlier conclusions about the potential for new exports and their responsiveness to the exchange rate.²¹

19. For a full analysis of the changes, see *ibid.*, pp. 5 ff.

20. One of the motives for price checks was evidently the fear that there would be overinvoicing of exports eligible for high rebate rates.

21. In July 1972, SPO officials indicated that 1972 exports were running about \$120 million ahead of 1971 exports.

Table C-2
Turkey's balance of payments, 1969 to 1971 (millions of U.S. dollars).

	1969	1970	1971
<i>Exports f.o.b.</i>			
Cotton	114	173	193
Tobacco	81	78	86
Hazelnuts	108	87	84
Other crops exports	59	62	80
Livestock	24	29	38
Industrial products	135	139	175
Minerals	17	20	21
Total exports	537	588	677
<i>Imports c.i.f.</i>			
Investment goods	-362	-439	-533
Intermediate goods	-403	-467	-590
Consumption goods	-36	-42	-48
Total imports	-801	-948	-1171
<i>Invisibles</i>			
Debt interest payments	-44	-47	-47
Tourism and travel	-5	4	21
Workers' remittances	141	273	471
Other (including offshore)	-48	-41	-60
Net current account	-220	-171	-109
<i>Capital account</i>			
Debt payment	-108	-158	-91
Private foreign capital	24	58	45
Projects credits	174	179	210
Consortium credits	106	217	89
Other (including SDRs)	61	135	95
Reserve movements	6	-236	-346
Errors and omissions	-37	-24	107

Notes: For imports by use categories, SIS gave monthly figures for 1971 and individual averages for pre-devaluation and post-devaluation periods for 1970. Simple averages of the figures were used to obtain the annual percentages.

Sources: Balance of payments components: Yaşar, *op. cit.* (Note 9), p. 69. Exports by commodities: *Ibid.*, p. 71. Imports by use: the percentage distribution given in *Monthly Bulletin of Statistics II*, 1972, SIS were multiplied by total imports.

Invisible earnings. Although export earnings increased markedly, the big shift in Turkey's foreign exchange earnings originated in invisibles, especially workers' remittances. As Table C-2 shows, workers' remittances rose from \$141 million in 1969 to \$471 million in 1971. Part of the phenomenon was

the result of workers switching their foreign exchange transactions from unofficial channels to official ones, as the black market all but disappeared after devaluation. The government implemented additional measures designed to induce workers to deposit their savings with Turkish banks (in long-term convertible accounts paying 9 per cent) rather than abroad, and also announced that Turks would not be questioned about the source of foreign exchange when it was deposited at local banks. Some of the increase in workers' remittances therefore reflected the counterspeculative flows, and thus undoubtedly represents a once-and-for-all phenomenon as workers moved past savings back to Turkey and others transferred funds to Turkey. Part, however, represents an increased flow, as funds move through official channels which formerly would have been deposited abroad.

Other invisible transactions showed much smaller changes. Tourism and travel changed from a small debit to a small credit item, which may again have reflected a move away from the black market. Debt-servicing items were not significantly affected.

Import liberalization. Imports rose from \$801 million in 1969 to \$1,171 million in 1971, for a 46 per cent increase over two years. Comparing the import data in Table C-2 with the program figures for 1970 (Table VI-2), imports of both intermediate goods and investment goods, particularly the latter, exceeded the Plan. In 1971 imports of intermediate goods rose to \$590 million, and imports of investment goods also continued to increase rapidly.

Thus imports represented 10.2 per cent of estimated GNP in 1971, contrasted with 6.2 per cent in 1969,²² and the absorption of purchasing power through the combined effects of higher import EERs and the increased real flow of imports was sizeable. As will be seen below, there is evidence of a slowdown in the level of economic activity in 1971, but in view of the rapid increase in imports, it was remarkably slight.

There is as yet insufficient evidence with which to evaluate the effects of import liberalization. There were frequent stories in 1971 of businessmen who had applied for import licenses well in excess of what they would in fact use, and of their discomfiture when granted the full amount applied for. The penalty of course was that either licenses had to be used or part of guarantee deposits forfeited. Most observers agreed that the influx of imports had virtually halted black market transactions and had increased competitive pressures for many Turkish producers. The long-run effects remain to be seen.

22. Exports represented 5.2 per cent of GNP in 1971 contrasted with 4.1 per cent in 1969. The TL values of imports were TL 17.7 billion in 1971 and TL 7.75 billion in 1969. *Monthly Bulletin*, Central Bank, March 1972.

Capital flows. The combined effects of increased workers' remittances and export earnings reduced Turkey's current account deficit from \$220 million in 1969 to \$109 million in 1971, despite the increased flow of imports. On capital account, private foreign capital inflows increased somewhat and foreign aid (project and consortium credits) rose substantially, from \$280 million in 1969 to \$396 million in 1970, returning to \$299 million in 1971. There was also a large positive errors-and-omissions item of \$107 million in 1971, probably reflecting a reverse speculative flow.

The net result was a huge increase in Turkey's reserves, \$236 million in 1970 and \$346 million in 1971. Thus the swing in the balance of payments following devaluation was large by any standard, and Turkey's reserves were more than comfortable early in 1972.

In contrast to the 1958 devaluation, therefore, the 1970 devaluation resulted in a sharp and immediate improvement in the balance of payments. Part of the difference originated from the response of workers' remittances, and part can be attributed to the good harvest of 1971. But the export response was considerably greater than post-1958 and cannot be attributed entirely to these factors.

There are too many unknowns to evaluate whether foreign exchange earnings will continue to increase rapidly. One uncertainty is the rate of domestic inflation, to be discussed below. Another is the orientation of the Third Five Year Plan, which is being formulated at the time of this writing. Rapid increases in investment and orientation toward development of still more import-substitution industries (especially heavy industry) could offset much of the new incentive for exports created by the devaluation. On the other hand, if further moves in the direction of equalizing incentives are taken as imports are allowed to increase, the prospects for future growth in foreign exchange earnings would be much brighter.

The domestic economy

The aftermath of the 1958 devaluation was one of generally disappointing balance-of-payments performance but attainment of the domestic goal of price stability. The short-term results of the 1970 devaluation were a greatly improved balance of payments but frustration of the domestic goal of price stability.

Inflation. Two exogenous factors contributed to the inflation. First, a new Personnel Law, passed in 1970, granted large salary increases to civil servants. The result was a 78 per cent increase in current government expenditures between the first half of 1970 and the first half of 1971, 85 per cent

Table C-3
Central bank assets, money supply, and price level 1968 to 1971

	1968	1969	1970	1971
<i>Central Bank assets</i> (millions of TL)				
Foreign exchange	278	1,153	4,301	8,772
Credits	15,961	18,835	20,483	22,191
Other assets	2,228	3,681	7,789	7,862
TOTAL	18,467	23,669	32,573	38,825
<i>Money supply</i> (millions of TL)				
Currency	8,237	9,081	11,850	13,917
Bank deposits	17,731	21,046	23,418	29,670
TOTAL	25,968	30,127	35,268	43,587
<i>Price level</i>				
Wholesale (1963 = 100)	129	137	146	169

Note: Gold is included with other Central Bank assets.

Sources: Central Bank assets from *Monthly Bulletin*, Central Bank, Jan.-March, 1972; *Monthly Bulletin of Statistics*, SIS, II 1972; and Yaşar, *op. cit.* (Note 9), p. 43. Money supply from *Monthly Bulletin*, Central Bank, Jan.-March, 1972. Price level: Ministry of Commerce.

of which are for salaries. To meet its increased salary obligations the government resorted to borrowing from the Central Bank. Second, the excellent harvest of 1971, combined with increased support prices for major agricultural commodities, resulted in a large increase in Central Bank credit to TMO.²³

Partial offsets were the deflationary effects of increased imports and additional revenues resulting from higher customs duty receipts and profits from the purchase of foreign exchange at the rate of TL 12 = \$1 and sales at TL 15 = \$1, at least for the first year after the devaluation. However, Central Bank foreign exchange reserves increased sharply, as seen above, and much of the increase was directly monetized. This was especially true of workers' remittances. Table C-3 gives the relevant data.

As can be seen, Central Bank credits expanded rapidly between 1968 and the election year of 1969, but their increase after that date was about 8 per cent annually. However, foreign exchange reserves rose sharply, especially between 1970 and 1971, when TL 4,471 million of the increase in Central Bank assets of TL 6,252 million was the change in reserves. This was reflected in an increase in the money supply of 23.5 per cent during 1971.

The natural result was a rapid rise in the inflation rate. The increase for 1971 as a whole was 15.7 per cent according to the Ministry of Commerce

23. The manner in which large crops can lead to inflation was spelled out in Chapter II.

wholesale price index. Monthly figures show even sharper movements. The wholesale price index stood at 139 in July 1970, 150 in December 1970, 164 in June 1971, and 185 in December 1971. Thus from December to December prices rose 23 per cent.

There was some indication in the summer of 1972 that the rate of inflation was beginning to decelerate, but it had by no means subsided to pre-devaluation levels. Several factors should be noted. The sharp increase in Central Bank credits between 1968 and 1969 would have been reflected in quickened inflation in 1970–1971 in any event (see Fry's results reported in Chapter II). Also, the cumulative increase in the price level from July 1970 to December 1971 was 33 per cent, just over half the effective devaluation. Since Turkey would have experienced some inflation even without devaluation, it would appear that the increase in prices associated with devaluation in the subsequent eighteen months was less than one third the effective devaluation. Even then, stronger actions to offset the inflow of reserves might have reduced the initial impact on the price level.

The real danger to the success of the devaluation comes not from the inflation experienced in the first eighteen months but from the danger that continued inflation (at a more rapid rate than would otherwise have been the case) will erode the increase in the PLD-EERs that devaluation accomplished. The timing of the Personnel Law and of the raising of price supports were therefore unfortunate in that regard. Whether the government can slow down inflation is a critical question; and at the time of writing the outcome is still in doubt.

Effects on the level of economic activity. Despite the high rate of growth of GNP in 1971 there is some evidence suggesting that a mild, short-lived recession followed the devaluation. As with the price level, however, an important exogenous factor contributed. That was the uncertainty associated with the political violence and formation of the Erim government.

One indicator is the ratio of currency to bank deposits, which rose sharply from 43 per cent in 1969 to 51 per cent in 1970 and reached a peak of 77 per cent in March 1971 (see Table C-3), and thereafter declined to more normal levels. Part of the increase may have reflected the release of previously frozen guarantee deposits, although delays in depositing the unfrozen funds would still be explicable only by political uncertainties.

As with the aftermath of the 1958 devaluation, the construction sector appears to have been most adversely affected. According to the national income accounts, real construction grew at 8 per cent in 1969, 5.5 per cent in 1970, and 1.1 per cent in 1971.²⁴ The fact that taxes were imposed upon

24. SPO estimates at 1965 prices.

new construction at the time of devaluation undoubtedly contributed to the decline in the rate of expansion. The result was a shift in the composition of investment, away from construction and toward plant and equipment, as real investment rose an estimated 4.5 per cent in 1971.

Two other indicators also suggest recession in the private sector. Real private fixed capital investment is estimated to have declined 0.9 per cent in 1971, although investment in inventory rose 30 per cent over 1970 levels. The second was a reduced demand for bank credit from the private sector. Of an increase in deposits of commercial banks with the Central Bank of TL 3.3 billion in 1971, TL 0.5 billion were above legal reserve requirements, and there was a sharp shift away from private sector credits.²⁵

Despite these factors, industrial output rose 8.7 per cent in 1971, although expansion had been only 2.5 per cent in 1970.²⁶ The fact of an excellent harvest in 1971 undoubtedly contributed purchasing power to the agricultural sector, which may have offset whatever decreases in demand originated from the construction sector. Thus to the extent that there was recession, it was extremely mild and took the form of a lower-than-average industrial growth rate rather than reductions in the level of economic activity.

An interesting question is what would have happened to the level of economic activity in the absence of the government's expansionist expenditure policies in 1970 and 1971. The existence of strong inflationary pressure suggests that government policies may have been too expansionist. On the other hand, the evidence indicates some slowing down in demand from the private sector. If that was so, government expenditure policies were necessary to prevent even greater recessionary forces from operating. Final judgment may well rest on whether the rapid price increases of 1970–1971 can be brought under control fairly quickly. If they can, the expansionist policies of the government may have buffered the economy from recession while enabling resource reallocation. If they cannot, the cost in terms of a more rapid rate of inflation in the long run way prove to be higher than Turkish policy-makers are willing to accept.

IV. Conclusions

It is too soon to pass judgment on the 1970 devaluation. The contrasts with the 1958 devaluation however are of interest. And there are also some

25. Yaşer, *op. cit.* (Note 9), pp. 38 ff.

26. The slow rate of expansion in 1970 may have resulted from import shortages, although further data are needed before a definitive analysis can be made. Certainly the slow rate of growth for the year cannot be attributed to the effects of an August devaluation.

pertinent similarities. Similarities include the Personnel Law with its impact on current government expenditures; the change of governments and political uncertainty following each devaluation; resort to a lower EER for traditional exports; and a backlog of import licenses awaiting foreign exchange at the time of each devaluation.

The contrasts are more pronounced. First, the structure of the Turkish economy was markedly altered between 1958 and 1970, and government policies pre-devaluation were noncomparable. Second, the 1958 devaluation was aimed as much at altering domestic policy and eliminating inflation as it was at improving the balance of payments, if only because the former was a necessary condition for the latter. In 1970 the devaluation did not signal major changes in domestic policies and was aimed at improving the balance of payments. Third, the 1958 Stabilization Program virtually eliminated inflation, whereas the 1970 devaluation intensified it. Inflationary pressure resulted primarily from success in increasing foreign exchange reserves which increased the money supply. Finally, the 1970 devaluation resulted in an immediate improvement in the balance of payments, whereas the 1958 improvement was far smaller. Judged by its effect on the balance of payments in the first eighteen months, the 1970 devaluation was the more successful of the two.

Construction activity appears to have been retarded after both devaluations, and investment composition shifted toward plant and equipment. Private sector investment appears to have declined after each devaluation although manufacturing output has increased. These similar responses tend to confirm the analysis of earlier chapters that import shortages and currency overvaluation may lead to distortions of investment toward construction activity when insufficient imports are available. In addition, business activity becomes increasingly oriented toward short-term gains achievable through obtaining import licenses. When devaluation occurs these tendencies are reversed. Since construction investment has a higher fraction of domestic value-added than plant and machinery investment, the initial response is a slowdown in the rate of economic activity.

The Turkish economy remains heavily oriented towards import-substitution, despite the devaluation of 1970. Incentives for non-traditional exports were increased, but are still markedly less than incentives for import-substituting production. The prohibited list remains a highly protective instrument for encouraging new import-substituting industries, and to date there is no mechanism for gradual reduction of protection as industries become established.

Turkey's very ample foreign exchange reserves, combined with the opportunities for liberalization associated with her prospective membership in the Common Market, offer an opportunity to move gradually toward a more open economy. Whether that path will be chosen, however, remains to be seen.

APPENDIX D-1

DEFINITION OF CONCEPTS USED IN THE PROJECT

Exchange rates

1. *Nominal Exchange Rate*: The official parity for a transaction. For countries maintaining a single exchange rate registered with the International Monetary Fund, the nominal exchange rate is the registered rate.

2. *Effective Exchange Rate (EER)*: The number of units of local currency actually paid or received for a one-dollar international transaction. Surcharges, tariffs, the implicit interest foregone on guarantee deposits, and any other charges against purchases of goods and services abroad are included, as are rebates, the value of import replenishment rights, and other incentives to earn foreign exchange for sales of goods and services abroad.

3. *Price-Level-Deflated (PLD) Nominal Exchange Rates*: The nominal exchange rate deflated in relation to some base period by the price level index of the country.

4. *Price-Level-Deflated EER (PLD-EER)*: The EER deflated by the price level index of the country in question.

5. *Purchasing-Power-Parity Adjusted Exchange Rates*: The relevant (nominal or effective) exchange rate multiplied by the ratio of the foreign price level to the domestic price level.

Devaluation

1. *Gross Devaluation*: The change in the parity registered with the IMF (or, synonymously in most cases, *de jure* devaluation).

2. *Net Devaluation*: The weighted average of changes in EERs by classes of transactions (or, synonymously in most cases, *de facto* devaluation).

3. *Real Gross Devaluation*: The gross devaluation adjusted for the increase in the domestic price level over the relevant period.

4. *Real Net Devaluation*: The net devaluation similarly adjusted.

Protection concepts

1. *Explicit Tariff*: The amount of tariff charged against the import of a good as a per cent of the import price (in local currency at the nominal exchange rate) of the good.

2. *Implicit Tariff* (or, synonymously, tariff equivalent): The ratio of the

domestic price (net of normal distribution costs) minus the c.i.f. import price to the c.i.f. import price in local currency.

3. *Premium*: The windfall profit accruing to the recipient of an import license per dollar of imports. It is the difference between the domestic selling price (net of normal distribution costs) and the landed cost of the item (including tariffs and other charges). The premium is thus the difference between the implicit and the explicit tariff (including other charges) multiplied by the nominal exchange rate.

4. *Nominal Tariff*: The tariff — either explicit or implicit as specified — on a commodity.

5. *Effective Tariff* or *Effective Rate of Protection* (ERP): The explicit or implicit tariff on value-added as distinct from the nominal tariff on a commodity.

6. *Domestic Resource Costs* (DCR): The value of domestic resources (evaluated) at "shadow" or opportunity cost prices) employed in earning or saving a dollar of foreign exchange (in the value-added sense) when producing domestic goods.

APPENDIX D-2

DELINEATION OF PHASES USED IN TRACING
THE EVOLUTION OF EXCHANGE CONTROL REGIMES

To achieve comparability of analysis among different countries, each author of a country-study was asked to identify the chronological development of his country's payments regime through the following Phases. There was no presumption that a country would necessarily pass through all the Phases in chronological sequence. Detailed description of the Phases will be found in Bhagwati and Krueger, *Foreign Trade Regimes and Economic Development: Experience and Analysis*.

Phase I: During this period, quantitative restrictions on international transactions are imposed and then intensified. They generally are initiated in response to an unsustainable payments deficit and then, for a period, are intensified. During the period when reliance upon quantitative restrictions as a means of controlling the balance of payments is increasing, the country is said to be in Phase I.

Phase II: During this Phase, quantitative restrictions are still intense, but various price measures are taken to offset some of the undesired results of the system. Heightened tariffs, surcharges on imports, rebates for exports, special tourist exchange rates, and other price interventions are used in this Phase, but primary reliance is placed on quantitative restrictions.

Phase III: This Phase is characterized by an attempt to systematize the changes which take place during Phase II. It generally starts with a formal exchange-rate change and may be accompanied by removal of some of the surcharges, etc., imposed during Phase II and by reduced reliance upon quantitative restrictions. Phase III may be little more than a tidying-up operation (in which case the likelihood is that the country will re-enter Phase II), or it may signal the beginning of the removal of reliance upon quantitative restrictions.

Phase IV: If the changes in Phase III result in adjustments within the country so that liberalization can continue, the country is said to enter Phase IV. The necessary adjustments generally include increased foreign exchange earnings and gradual relaxation of quantitative restrictions. The latter relaxation may take the form of changes in the nature of quantitative restrictions or of increased foreign exchange allocations, and thus reduced premia, under the same administrative system.

Phase V: This is a period during which an exchange regime is fully liberalized. There is full convertibility on current account, and quantitative restrictions are not employed as a means of regulating the *ex-ante* balance of payments.

APPENDIX D-3

LIST OF IMPORTANT TURKISH NAMES AND
ABBREVIATIONS

<i>Atatürk</i>	The leader of Turkey's independence movement and of the country until his death in 1938.
<i>Demirel</i>	Prime Minister of Turkey from 1965 to 1971.
<i>Democratic Party</i>	The party led by Prime Minister Menderes, in power in the 1950's. It was dissolved after the May 1960 Revolution.
<i>Ereğli Steel</i>	A steel mill built in the 1960's at Ereğli with the help of U.S. aid.
<i>EBK</i>	Et ve Balık Kurumu. The state enterprise for meat and fish.
<i>Étatism</i>	The name given to the economic philosophy adopted during the 1930's, under which State Economic Enterprises and private sector firms would both participate in Turkey's economic development.
<i>FFYP</i>	The First Five Year Plan, 1963-1967.
<i>Justice Party</i>	A party formed in the 1960's which attained power in the elections of 1965. It is somewhat more free-enterprise oriented than the RPP, its largest competitor during the 1960's.
<i>Kuruş</i>	One one-hundredth of a Turkish Lira.
<i>Menderes</i>	Prime Minister of Turkey from 1950 to the May 1960 Revolution and leader of the Democratic Party.
<i>NUC</i>	National Unity Committee. The group which governed the country after the May 1960 Revolution until the elections in the fall of 1961.
<i>RPP</i>	Republican Peoples' Party. The major opposition party in Turkey from 1950 to 1961 and from 1965 to the present. Its most famous leader, and Prime Minister during the early 1960's, was İsmet İnönü. It is the party founded by Atatürk.
<i>SEE</i>	State Economic Enterprise, a government-owned firm engaged in economic activity.
<i>SFYP</i>	Second Five Year Plan, 1968-1972.

<i>SIS</i>	State Institute of Statistics (Devlet İstatistik Enstitüsü).
<i>SPO</i>	State Planning Organization (Devlet Planlama Teşkilatı).
<i>TMO</i>	Toprak Mahsulleri Ofisi (Soil Products Office).
<i>Union of Chambers</i>	Union of Chambers of Commerce and Industry, a semi-official body to which all private sector firms with ten or more employees belong. The Union bore a major responsibility for allocating imports among private sector firms, and has represented the interests of the private sector in government deliberations on many subjects.

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